

AMERICAN RAILROAD JOURNAL, AND ADVOCATE OF INTERNAL IMPROVEMENTS.

PUBLISHED WEEKLY, AT No. 35 WALL STREET, NEW-YORK, AT THREE DOLLARS PER ANNUM, PAYABLE IN ADVANCE.

D. K. MINOR, EDITOR.]

SATURDAY, AUGUST 16, 1834.

[VOLUME III.—No. 32.]

CONTENTS :

Parnell on Roads; Paterson Railroad; On the Probable Location of Railroads and Canals; &c.	page 497
Proposed Road for Locomotive Engines.	498
Experiments on Wheels with Straight and with Curved Arms; Lake Ontario Steamboats.	499
Railroad across the Isthmus of Panama	500
Improved Mode of fixing Valves, &c.; Miscellaneous Items.	501
A Double Canoe of the Friendly Islands; Canning's Dispatch-Raft; Aerial Steamboat.	502
Agriculture, &c.	503
Literary Notices.	506
Foreign Intelligence	508
Summary.	509
Advertisements, &c.	511—512

AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, AUGUST 16, 1834.

PARNELL ON ROADS.—We are indebted to the Messrs. Harpers of this city for a copy—indeed, the *only* copy to be found in New-York—of a treatise on roads, by the Right Hon. Sir H. Parnell. It is said—and we can only speak of it at present from hearsay—to be a very valuable work. If we find it so—and we cannot doubt it—our readers will have an opportunity to judge of it for themselves, as we shall publish it, or most of it, in the Journal, and afterwards in book-form, at a cheap rate. We shall, at any rate, make copious extracts from it.

We publish in this number of the Journal the official decree of the Colombian government, upon the subject of a rail, or other, road across the isthmus of Panama, together with a well-written article from the Washington Globe upon the same subject. Several attempts have been made within the last 12 years, by different persons, to project a plan by which this grand object could be effected; but all have failed. The present one will not, we hope, share the fate of the others.

There are men in this city who might, with their own funds, accomplish the undertaking; and in doing it *treble* their wealth, as well as immortalize their names. Who would not be more proud of such a victory than of conquering the conqueror of the world, if the latter must be attended with the misery which usually attends military achievements? Who is there that would not prefer to have his name coupled with such a work, than to be the victor of Waterloo? The latter consigned thousands to the grave—the former would be the means of furnishing

hundreds of thousands with the means of happiness and wealth.

We should be exceedingly gratified to learn that the work is to be accomplished by American enterprise and American capital.

RAILROAD TRAVELLING.—It appears, says the Baltimore Gazette, that the amount received by the Baltimore and Ohio Railroad Company from persons travelling between Baltimore and Frederick, during the month of July last, exceeded *Eight Thousand Dollars*. A gentleman who took an excursion on the railroad a few days ago, informs us that there were between three and four hundred persons in the two trains that ran to Ellicott's Mills in the afternoon. They were drawn by new locomotive engines, of American construction, using anthracite coal for fuel, and working with a degree of ease, power and swiftness, fully equal to the best English engines. The passage by each other, in opposite directions, of the trains of carriages, he described as being but the work of an instant, leaving on the minds of the passengers a strong and lively impression of the wonderful facilities afforded by this mode of conveyance.

[From the Patterson Intelligencer of 13th Aug.]

Since the Railroad has been brought into the centre of our town, instead of landing the passengers at the depot, in the outskirts, a manifest improvement in its business is exhibited. Four times in each day our village is thronged with strangers in pursuit of business, pleasure and health, giving life to our streets, and profit, we should hope, to the stockholders of the beneficial institution by which this effect is produced. During the month of July, we have ascertained that 6359 passengers travelled this road, viz. 5584 through passengers, and 775 way passengers.

The report of the Committee appointed in February, 1833, to examine into the state and prospects of the road, is before us, by examination of which we find the expectation was, that when the Railroad was completed to the river, 172 passengers per day would travel on it. The experience of the present season appears to insure more than a fulfilment of these expectations, as, though one of the principal inducements for travellers to use this road, viz. its being finished to New York, is wanting, yet during the last month it considerably overran this estimate, and we understand has thus far in the present month, averaged 217 passengers a day.

Franklinville, Baltimore county, Md., August 13, 1834.

To the Editor of the Railroad Journal.

Sir,—In your article on Improved Railroad Wheels in the Journal of the 9th, you speak of me as being the inventor of the plan of the wrought iron rod in the wheels, which is a mistake. It was invented and patented by Mr. Phineas Davis, of the firm of Davis & Gartner, and the only agency I have had in the business, has been to mount Mr. Davis' wheels or axles, for the Baltimore and Ohio Railroad Company, and for other companies, and I am prepared to execute orders for similar work, the wheels to be furnished by Davis & Gartner.

Yours, respectfully,

DEAN WALKER.

On the Probable Location of Railroads and Canals. To the Editor of the American Railroad Journal, &c.

Sir,—A writer in the Railroad Journal of the 14th inst., who signs himself "C. O." (Deep Creek,) has given the public a few remarks on the location of railroads and canals, in which he proposes to call their attention to the proper direction of these works, so as to meet the general improvements now progressing in our extensive country, and to adapt them to such advances as future enterprise may produce. He has, however, only touched the outline of the subject, without investigating the principles upon which such works should be conducted: considerations which are indispensable for the accomplishment of the object proposed. In the following views, of the inquiries of C. O. are pursued and extended, and, it is hoped, illustrated in such a way as to call the attention of the public to an examination of this interesting subject.

It may be very difficult, in treating a subject of this kind, to avoid the consideration of the question which of the two modes of conveyance, railroads or canals, is to be preferred, and likely to supersede the other in public estimation.

As the subject has been investigated by the ablest engineers, and others qualified to judge, both in Europe and the United States, the whole of which is to be found in the preceding pages of the Journal, it will be avoided, so far as may be done without leaving the matter under discussion imperfectly explained.

The subject of canalling in our country has been the theme of such profound inquiry—the several practicable and even possible routes and plans for such works, so often made the subject of minute estimate and investigation—that it may be said to be in a manner exhausted. It is at this time scarcely possible to find a line of country of any extent, through which such work could be opened without incurring an expenditure not be justified by the profits. The success of the Hudson and Erie Canal in New-York has induced numberless efforts of this kind, and awakened an almost enthusiastic zeal in favor of them. The public were captivated by the brilliant results from this gigantic enterprise, not only in the amount of tolls, but also in the universal improvement in the value of the landed property which followed its completion. But in how few other cases has success attended the opening of canals? Even in the state of New-York, many of the canals

which have been made since the completion of the first great work have been failures, and are now supported from the profits of the one first completed.

The great canal now under construction from Washington city to the Ohio, (the Chesapeake and Ohio Canal,) if ever completed, is not expected to afford tolls to the amount of 2 per cent. on its cost; and yet this passes through a country abounding in agricultural production, and mines of valuable minerals.

The Delaware and Chesapeake canal is understood to be an unproductive stock; and the canal, through the Dismal Swamp, which has been more than 30 years in progress, now that it is completed, is found to produce a very meagre dividend in tolls. Of the canals cut by the state of Pennsylvania, and the chartered companies within its limits, scarcely one in ten is expected to be profitable stock, and its citizens are now turning their attention to railways, &c., as a substitute for them. In short, there is scarcely a great work of this kind, (the Hudson and Erie Canal excepted,) which has not terminated unfavorably to the adventurers. It is not proposed to enter into an inquiry what, in our country, has been the cause of these failures in canals—works which are so productive in the European states; but merely to assume the fact, as one which will not be controverted by persons experienced in these works, that, in our country, canals are enterprises attended with danger of loss to the parties adventuring, and that there are few situations when they could be attempted, (on a large scale at least,) without hazard of the loss of capital.

With respect to railroads, the matter may be said to be very different. They may, it is believed, be constructed under many circumstances, in which canals are inapplicable, at less cost, and an almost absolute certainty of giving a better return in tolls for the capital employed.

The following are the principles which, it is believed, should direct the selection of a route for a railroad, and which, if practised on, will insure success, without regard to future changes or contingencies.

1. In the 1st place, railroads should be laid out to run from the fertile districts of the interior of the states, to some (the nearest) seaport or navigable waters, whence the articles conveyed on them may be transported to a foreign or distant market.

2dly. The great intercourse now subsisting between the seaport towns on the Atlantic requires the benefits of this mode of conveyance. The time cannot be far off when this intercourse will be increased to an indefinite extent. In the interim, railroads may be built with a certainty of profit between any of these cities, until a continuous line is finished from Boston, (perhaps Portsmouth, N. H.,) to St. Mary's, in Georgia; and it is probable the line might be safely extended from St. Mary's to St. Marks, on the Gulf to Mexico. The intervening country between the two places having been ascertained by Gen. Barnard to be eminently favorable to such a work. (The Peninsula being only 150 miles across, and the highest land on the ridge about 50 feet above the level of the ocean.)

Another class of railroads which promise certain profit on the capital invested, are the lateral roads which will be run from the mines of coal, iron, lime, plaster, &c., which abound in the mountainous region of some of the states, to some road or canal extending from the fertile interior districts of the country to a seaport. The number of lateral roads which will be required for the transport of these products of the mines, must be matter of conjecture. Every day adds to the discovery of beds of valuable mineral substances, and to the number of mines opened: from all which lateral roads must be constructed to intersect the nearest railroad or canal to navigable water. Many of these are already in profitable operation, and are connected with some main line of railroad or canal, by which the produce of the mines is conveniently carried to market.

From what has been said it would seem that

canals offer few inducements for the enterprising to engage in their construction: that few situations in our country are adapted for this purpose, unless at an expense which the profits will not justify; that, if constructed at all, the selection of the routes must be left to the judgment of the engineer, looking to the probable advances of the country in other general improvements; that no definite rules can be laid down for their construction, their success depending upon so many contingencies, not likely to be united in their favor, &c. But that railroads may be undertaken with confidence of success, wherever they are made to run from a seaport or navigable water to a district of the interior country, which affords a large quantity of valuable agricultural or manufacturing products; that they will succeed, if run from one seaport to another, everywhere on the Atlantic coast, from Portsmouth, N. H., to St. Mary's, Ga., and probably across the Peninsula to a port on the Gulf of Mexico, (as St. Marks;) and, lastly, that they will probably yield a certain and profitable return, when run laterally from beds of mineral products, to intersect other main railroads or canals leading to a place of export.

The introduction of locomotive engines, to propel carriages on railroads, has greatly added to the utility of this mode of conveyance; and the improvements which modern enterprise has made in their structure, increasing, to an almost unlimited extent, the power of the engine, and at the same time giving greater strength, and affording a surer protection from casualties, will serve to exalt them in the public estimation and ensure their universal employment.

CIVIS.

Proposed Road for Locomotive Engines. To the Editor of the Railroad Journal, and Advocate of Internal Improvements.

SIR,—It must be apparent to those who notice the progress of improvements, and especially to the readers of your valuable journal, that a new era in this branch of the economy has commenced.

The enthusiasm which seems to pervade our country, to say nothing of the old world, for establishing railroads and canals, will put a new face upon human economy. Inland commerce, and even military movements, will scarcely feel the obstacles of time and space, which once so fearfully embarrassed their operations.

Whoever will consider the unsatisfying nature of all partial improvements, and the excessive anxiety to extend them, not merely through all the great thoroughfares for travelling and transportation, but to every hamlet in the country, will realize the truth of what may otherwise seem extravagant.

There is no good however without an alloy. The enthusiasm and spirit of competition which so excites the public mind will no doubt often cause an unprofitable expenditure and misapplication of large sums of money, which the owner can ill afford to lose. Railroads will be made at unnecessary cost, and in places where the business would not pay for them at the lowest cost. It has occurred to the writer of this article that this evil may be at least somewhat remedied, and without checking in the least the public ardor for improvement. A just regard for economy requires that every device for transportation should be apportioned, in its expense, to the business to be done. A road from Baltimore to the Ohio must not be allowed to cost as much per mile as one from Liverpool to Manchester; or if it must cost as much, the work can only be done by posterity.

This course of reflection is presented to the reader because it led the writer to the conclusion that a road, which can be constructed much cheaper, and repaired at less expense than a railroad, and yet approaching its conve-

nience and usefulness, is a great desideratum in the present system of improvements. To accomplish this end, it is proposed to make a road in the following manner, viz.: The route having been selected and line determined, with great care, let the grading be done in the usual manner, varying in width from 12 to 24 feet, making the narrowest parts where the work is most expensive, and vice versa; when the embankment is formed, roll it down well with a massive cast iron roll, then put on a coat of gravel or shell stone about 4 inches thick, and roll again. When the road is finished, let it be used as follows: No other power than a locomotive engine to be permitted; these are cheaper than horses, especially when, as in this case, they require but little weight to prevent the slipping of the wheels. All the cars or waggons to be used must have wheels whose width is apportioned to their load, say none less than 8 inches wide; and to prevent injury to the road, one axletree of the waggon should be shorter than the other, so that two 8-inch wheels might roll 12 inches, or cars for light loads may be made with three narrow wheels, two before and one behind, or reversed, as might be found most convenient.

Different waggons should not all be of the same width; the more diversity in this respect the better. It can scarcely be doubted that, with such power and vehicles, the road would easily be kept smooth, and become very hard. Constant but not expensive attention would be required to fill up any depression with proper materials. Drains must be kept open and care taken to let the water run off at the sides. In the winter, a broom attached to a car, with gearing similar to that which is used to water city streets, could be made to sweep off all the snow. This apparatus, as well as the waggon which supplied the gravel, &c., for repairing, could be attached to one of the trains at pleasure, with very little expense for power. It is unnecessary to state in detail all the arrangements that may be made for preserving the road and promoting economy. The heaving of the frost in winter will be deemed perhaps the most formidable obstacle to this form of road; but it is not found that paved streets, or the M'Adam's road, or even the common stone turnpike, is injuriously affected by this cause. They are injured by the pressure of heavy loads on narrow wheels, while the earth is soft. If the pressure were upon a greater surface, the injury would be diminished. The nearer we can arrive at an equal action or stress, upon all the parts of any mass of matter, the less effect will be produced on each of those parts; and the more solid the material, and uniform the condition, of any such mass, the greater will be its power of resistance. To attain the first, the wide wheel is relied on; and the last is approached by grading the road as much as practicable some two or three feet above the common surface, and where excavations are necessary, keeping out the water by drains. In wet springy grounds, grubble stone may be found essential. The dryer the road is kept, the less will be the effect of frost; and the more uniform the moisture in it, the less will any part be displaced by freezing or thawing, by reason of the expansion and contraction of all the parts together.

Good gravel turnpikes, where heavy loads are not put on them, keep their form remarkably well, with but little care in repairing, although exposed to the action of horses' feet, and of narrow wheels always running in the same rut. The road from Baltimore to Washington is an example of this kind. The public gravel walks in the cities are not injured by frost or rain, and one of the means for averting such injury is rolling them with heavy rollers, not unlike, but less effective, than the rolling of the wheels of the waggons, as proposed. These considerations have satisfied the writer that no serious inconvenience is to be apprehended from frost, and that the road may be used with but little interruption from that cause throughout the year in any part of the

United States. Heavy drifting snows would perhaps be thought difficult to conquer; but it is known that there occurred, during the winter of 1830-31, an unusually severe drifting snow, and yet the cars on the Baltimore and Ohio railroad were not stopped, even in their deep cuts, more than a single day; the snow being swept off as fast as it fell on the road, by a machine attached to the cars. It remains to notice some of the peculiar advantages of the proposed road. Here it should be observed that it is not intended to recommend it as preferable to a railroad, where the assurance of business will justify the expense of the latter; but as a valuable substitute where that is not the case, and as being free from some important objections to which railroads are liable.

The proposed road must, as well as railroads, necessarily be under the exclusive direction of a company, or of a special municipal authority, which has power to prescribe and enforce regulations; but these regulations will admit of a much more diversified operation of business than can be conducted on a railroad: the vehicles for transportation may meet or pass at pleasure, and may be drawn at any speed suited to the business of the owners. Companies or individuals running stages, carrying the mail transporting merchandize, or heavy products, having their respective establishments of engines and trains, may each start at their own time, and run at the most convenient speed. Where there are no ruts, the slow train may easily turn out for the faster one to pass. This operation approaches very nearly to all the advantages of a road for general business, gives full scope to competition, and of course protects the community from some of the dangers of monopoly. Another essential advantage of this road is, that an engine of light construction may exert a much greater power in ascents than can be done where the wheels run upon an iron rail.

As this is an important consideration, I may be excused for presenting it more distinctly.

A locomotive engine, weighing 6 tons, where all the wheels are worked, is ascertained by experiment to contain an adhesive power of 672 lbs. on a level, which is one-twentieth of its weight. This engine will draw a load of 17,658 lbs. in addition to its own weight, without detrimental slipping of the wheels, up a plane of 1 foot in 50. The proportion which the adhesive power of wheels on a gravel road bears to the weight of the car is not yet accurately ascertained; but when it is considered that the diameter of the wheels may be greater than would be safe for those of railroad cars, it will not be unreasonable to estimate the adhesion at one-eighth the weight of the car, two-thirds of the load resting on the working wheels. Even on the iron rail, the adhesion has been found under very favorable circumstances more than one-tenth of the weight upon the wheels. According to the proposed estimate of one-eighth, an engine weighing 3 tons contains adhesive power of 830 lbs. On a level, and after making the proper deductions as before, for the gravity of the engine and its diminished pressure on the ascending plane, its adhesive power will, on a plane of one in fifty, be sufficient for drawing a load of 28,450 lbs. in addition to its own weight. If the ascent of the plane be 1 in 25, the effective adhesive power of the six-ton railroad engine will only be sufficient for a load of 2,320 lbs., while that of the three-ton gravel road engine will suffice for a load of 14,700 lbs. The calculations for these results are made from the usual allowance of 10 lbs. to the ton for the friction of the loaded cars; that for the engine car, being a constant quantity, is not taken into account. An allowance is made also for the diminution of pressure, and consequently of adhesion on the planes, which, although neglected by the writers on railroads which I have met with, is an important item. From these facts it will be seen; that upon the hard gravel road an engine will have adhesion enough to employ a much greater portion of its steam power on ascents than can be effected on

a railroad; and consequently, the engine being less embarrassed by its own weight, may be proportionably lighter. It is also apparent that when the whole steam power of an engine can be exerted, without slipping the wheels, it can ascend much steeper acclivities. To what extent this may be accomplished, remains to be ascertained; but if ascents of 1 in 20 can be overcome, there will be no difficulty in crossing over a mountainous country without the aid of any other machinery than the locomotive engine. There are few mountains which may not be graded to four and one-third degrees. There is another consideration which strongly recommends the proposed road: wherever the grades are not too steep, the road will be a perfect preparation for laying a double track of rails, which may be done as soon as business will justify. The steep acclivities must necessarily be overcome by other means, and the location adapted to such change of plan. In conclusion, it may be remarked that the most effective plan of transportation, whether it be railroad or canal, should be adopted, when the business will justify the expense, and all other plans must be regulated by the same considerations, viz.: business and expense.

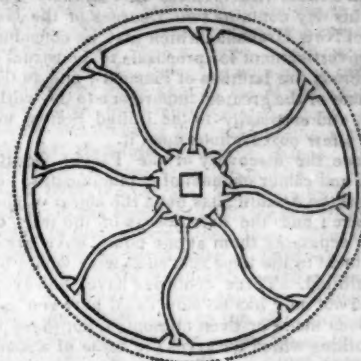
The pioneers of the wilderness are obliged to begin with a pack-horse path, while the people of the Atlantic border, with their hundreds of passengers and tons of merchandize passing daily, may afford to make railroads at almost any expense. All intermediate conditions of business must necessarily adapt their roads to their circumstances. Each path or road, however little frequented, is tributary to others in more general use, which, like the streams passing from the summit regions to the ocean, gather business as they progress, and justify a proportionate expense in their improvement. And prudent men, however ardent their impatience to have the best roads, will be governed by the circumstances in which they are placed. It is in this view that a road which is preferable to the common turnpike, and cheaper than a railroad, is a desideratum in our transportation economy.

The varied ingenuity of those whose attention is now engaged in improvements, will no doubt discover some objections, and probable advantages, too, which have not occurred to the undersigned. The subject is however submitted to that candid consideration of an intelligent public, which cannot easily be led astray by unsubstantial projects. It may be observed, that the locomotive engines have been for some time in operation in England on common roads, where the projectors seem to be sanguine of entire success; but if it can be used on roads where horses' feet and narrow wheels are permitted to break the even surface, and over the hills of common turnpikes, how much better will they work on a road prepared and used as above proposed. Yours, &c., J.

Experiments on Wheels with Straight and with Curved Arms. [From the London Mechanics' Magazine.]

SIR,—Having read some remarks, by two or three of your correspondents, in regard to springs as applied to locomotive engines and other heavy carriages, and noticed the suggestion thrown out, that the spokes or arms of the wheels might possibly be made of such materials, and of such a form, as of themselves to counteract sufficiently the jolting of the superincumbent and progressing weight, and so dispense with the costly springs at present used, I am induced, by the perusal of these speculations, to send you an account of some experimental observations of my own, which have, I think, a strong bearing upon the subject. About five years ago, I fitted up some waggons, for a coal concern, which I have the management of here, to run upon a railway of cast iron. The wheels are of cast iron, but

have wrought iron arms, in the form and manner following:



In giving this curved form to the arms, I did not at the time contemplate that they should act as springs; though, as will be presently seen, it has been attended with great advantage. The ordinary weight of these waggons, when full of coal, is about 3 tons 15 cwt., waggon included. On this same railroad, an iron company have the privilege of conveying their iron ore, the waggons employed for which purpose are entirely of cast iron, with straight arms, and, when loaded, weigh (waggon included) something less than 3 tons. In the course of last summer, I found it necessary to repair a wooden bridge of considerable extent, over which both kinds of waggons had to pass, during the time these repairs were going on. To the great surprise of the workmen, they found that our own waggons, although the heavier, as above stated, produced less effect on the bridge than the others. This I could only attribute to the difference in the form of the arms of the wheels; and every observation which I have since made serves to confirm me in this conclusion. I have rode alternately on both sorts of waggons, when at their greatest speed, and certainly a sensible difference is felt to the advantage of the crooked and slender arms. The noise also which they make is much less. It may be proper to add, that the wheels with the wrought iron arms stand their work uncommonly well—much more so than the others. The fact is, we have not had one broken or worn out during the five years that they have been in constant use.

Should this article have the effect of turning the attention of some of your ingenious readers to the subject, it might be of service. Our wrought iron arms are 5 inches wide, and scarcely $\frac{3}{4}$ of an inch thick. Supposing, then, that, instead of being of wrought iron, they were made of steel of suitable quality, they might be made thinner than $\frac{3}{4}$, and with a greater number of arms: a much better form of curve, too, than that I have employed may very possibly be suggested.

I am, sir, yours, respectfully,
WM. BROUGH, Mineral Surveyor.

Cwmneath, Glamorganshire, Dec. 15, 1833.

LAKE ONTARIO STEAMBOATS.—It is not generally known to tourists, that there is a fine route from Saratoga to Ogdensburg, on the American shore, via Lake George and Champlain, which since the appearance of Cholera in Canada, is a good deal travelled. We learn that there has not yet been any case of Cholera on the American side. In consequence of the prevalence of that disease at Prescott and Kingston, the steamboat United States has, for the present, stopped touching at her usual landing places on the Canadian side of the River and Lake. Capt. Van Dewater makes a trip to and from Ogdensburg and Niagara every fifth day, running the whole 300 miles in from 33 to 35 hours.—[Albany Eve. Jour.]

[From the Globe.]

RAILROAD ACROSS THE ISTHMUS OF PANAMA.—The Globe of this day contains two Decrees of the Government of New Granada, which may be considered as an advertisement for proposals to construct a Railroad across the Isthmus of Panama; and as the subject is one of the greatest importance to the world in general, and especially to the United States, we shall offer a few observations upon it.

Ever since the discovery of the Pacific Ocean, some safer and easier channel of communication between it and the Atlantic, has been the object of universal desire; and the narrowness of the tract of land which separates them at one point, gave great encouragement to the hope that such wish would be speedily fulfilled. Three centuries have, however, passed, and not only has no ship canal between the two seas been made or even attempted, but there is actually nothing which deserves the name of a road, connecting any point on the one with any point on the other. Seldom, if ever, has a wheel carriage rolled from the Atlantic to the Pacific.

The Spanish Government did indeed order surveys, which were in one or two instances begun; and a host of decrees are still to be found in the old *Recopilaciones*, setting forth the importance of establishing a communication between the two oceans, the wealth it would produce, the power it would give to the Spanish Crown, &c; but the only work actually executed for the purpose, was by the voluntary exertions of a country curate and his parishioners, in the west of New Granada; they dug a canal through the valley of *la Raspadura*, by which, in the rainy seasons a boat might pass from the head waters of the Atrato, a long and shallow river emptying into the Atlantic; to those of the San Juan, a stream of similar character, falling into the Pacific. The work however proved of no utility.

Since the overthrow of the Spanish power in America, the governments of the new Republics lying between the two seas, have been much occupied with the subject, though it must be confessed that they have done little more than issue vague decrees. The decree published to-day is, however, more precise, being founded upon minute information as to existing circumstances.

Humboldt, in his great work on Mexico, enumerates nine points or situations in which the waters of the two oceans are very near each other; and in three of them, he conceived, from the information in his possession, that a ship canal might be made.

The first of these situations is in Mexico, between Guazacualco near Vera Cruz on the Gulf of Mexico, and Tehuantepec on the Pacific. The country has, however, been explored since Humboldt wrote, and it is now certain that a high chain of mountains intervenes, rendering all communication by water impracticable.

The second is in Central America. The plan proposed is to improve the navigation of the river San Juan, by which vessels could ascend into the Lake of Nicaragua. The southwestern extremity of that lake is only thirty miles from the Pacific, to which a canal might be made. The difficulties, judging from the partial surveys which have been made, are not greater than those which have been already surmounted in many other cases; still the expense of the undertaking would be enormous. The country is uninhabited, and laborers, as well as tools of every sort, would have to be brought from abroad; in addition to which, the deadly nature of the climate would render the sacrifice of human life incalculable. Companies have however been formed for undertaking this work, and engineers sent out to examine the ground, have reported favorably. The government of Central America was in 1830 treaty with that of the Netherlands on the subject, but the revolutions which occurred in both countries put an end to the negotiation.

The third in the Isthmus of Panama, which forms a part of New Granada, is the situation referred to in the decrees now before us. We can here form a better estimate of the difficulties to be overcome, and of the probability of success, as the country has been minutely examined with a view to this very object.—A survey was made in 1828-9 by an English engineer, Mr. Lloyd, and a Swedish officer, who were engaged for the purpose by Bolivar, and furnished with all the necessary instruments, of the most perfect order. Their account of the operations is published in the Royal Transactions of London for 1830, accompanied by maps and plans, and the utmost confidence is placed in its accuracy, by those who had the best means of forming a judgment.

The first question that occurs is as to the face of the country. Mr. Lloyd shows that "the spot where the Continent of America is reduced to its narrowest

limits, is also distinguished by a break for a few miles, of the great chain of mountains, which otherwise extends, with but few exceptions, to its extreme northern and southern limits;" and that "the principal difficulty in establishing a communication between the two oceans, either by canal or railroad, would arise, not from mountains, but from the number of rivulets to be crossed; which, though dry in summer, become considerable streams in the winter or rainy seasons." He states moreover the curious fact, that a great portion of the country traversed in crossing the Isthmus, actually lies below the level of the Pacific.

Another great question determined by the two engineers, is that of the relative height of the two seas, or their difference of level, which difference had hitherto been supposed very great. The facts are as follows:—The time of high tide is nearly the same in both seas. The mean difference between high and low water in the Pacific at Panama, is about 21 feet; in the Atlantic, at Chagres, about a foot.—Finally, "in every twelve hours, commencing with the high tides, the level of the Pacific is first several feet higher than that of the Atlantic; it then becomes of the same height, and at low tide is several feet lower; they are then again equal, the Pacific afterwards becomes the higher, and so on."

The conclusions to be drawn from the accounts of the engineers, are, that a railroad is certainly practicable; and the lines on which two could be made, are traced on the map. Each road would begin on Chagres river, about 30 miles from its mouth, in the Atlantic; the one terminating at Panama, on the Pacific, the other and shorter, at Chorrera, from which a short canal would lead to the latter ocean. Neither road would probably exceed 80 miles in length. The river Chagres now admits no vessels drawing more than 12 feet, but it could easily be made to communicate with the safe and spacious bay of Limon, by which means large ships could discharge their cargoes at the commencement of the railroad. A canal for boats is also practicable, but a railroad would be preferable for several reasons.

As for a ship canal, it is certainly impracticable at this spot. Supposing no difficulties to exist within the Isthmus, the shallowness of the Pacific for some miles from the coast, would forbid the entrance of ships; and it would clearly be of no value, unless it could be passed by vessels which could navigate both oceans to advantage. In a political point of view, we, at least, should oppose the opening of such a communication, the possession of which, by any other great naval power, might be highly injurious to our interests; and that the greatest naval power would soon possess it, cannot be doubted. In the present state of the world, a railroad promises every advantage to New Granada, and to the commercial world in general, which can reasonably be desired; and the transportation of passengers and letters alone, would doubtless yield a large revenue, particularly if steam boats were established from the principal places on each sea, to the respective extremities of the road.

OFFICIAL—DEPARTMENT OF STATE.

[Translated for publication by order of the Secretary of State.]

Decree of the Legislature of New Granada, authorizing the Executive to contract for the opening of a carriage road across the Isthmus of Panama.

The Senate and Chamber of Representatives of the Republic of New Granada, in Congress assembled, considering—

1. That the Message from the Executive to Congress, of April 6th, 1833, does specially recommend the propriety of having a road for carriages opened across the Isthmus of Panama, from the Atlantic to the Pacific:

2. That the Chamber of the District of Panama took up this important subject on the 16th of June, 1831, and that nothing has yet been done to carry its wishes into effect:

3. That the Province of Panama has again taken into consideration this same project, at its meeting of October 13th, 1833, on the petition of a citizen of the Isthmus, who has proposed a means of opening a carriage road, by which goods may easily be transported from one sea to the other:

DO DECREE.

ARTICLE 1. The Executive is authorized to receive all propositions which may be made for opening a carriage road across the Isthmus of Panama; and also to sign a contract with any person or company soliciting it, on the conditions fixed by this Decree.

ART. 2. The undertakers will have leave granted them to open an ordinary carriage or Railroad across the Isthmus of Panama, from the Atlantic to the Pacific; and they may make use of any water

course which may assist in forming the communication.

ART. 3. The road must be begun within two years at farthest after the privilege has been granted; the time in which it is to be finished will be stipulated in the contract.

ART. 4. If the road should pass over private lands, the owners shall be obliged to sell them at a fair price; that is, at what may be considered their value by arbitrators, at the time when the work is begun. If the land over which the road is to pass be public, (*valdía*), it will be given without requiring indemnification.

ART. 5. The undertakers shall have the right to build warehouses or other edifices necessary for carrying into effect the objects of the enterprise, at convenient places, provided they do not interfere with the laws relative to fortifications. For such purposes, they may occupy as much land as may be necessary, no where, however, to exceed 10,000 square varas, (962 square yards,) for which indemnification is to be made as by article 4th, or rent to be paid, when the owners decline selling the property.

ART. 6. The undertakers shall be allowed, as a fair remuneration, according to the species of road they may make, the enjoyment of the revenue from it, for a period not less than 10 years, nor more than 50.

(1.) The right of demanding toll shall begin the moment the road is finished, and the *maximum* of such toll shall be that expressed in the tariff granted by the Legislature of the Province of Panama.

(2.) Should a rail-road be made, leave may be granted to the undertakers to place steam carriages on it; in which cases, it shall be settled in the contract what is the *maximum* price to be demanded for the transportation of persons or goods, from one sea to the other.

ART. 7. The undertakers shall have granted them, as a recompense, public lands in the Isthmus, for cultivation, to the extent of 20,000 *fanegadas*, (about 100,000 acres) which they must begin to settle and cultivate within a year after they have received them; otherwise they will revert to the nation.

ART. 8. On the said 20,000 *fanegadas* of public land, foreigners may be established, who, for 20 years, shall be free from all taxes either on the land or its productions; nor shall they be required to do duty in the army, unless in case of foreign invasion.

ART. 9. Inhabitants of the Isthmus, or a company composed, in part of such, will have the preference, under the same circumstances, in receiving the contract.

ART. 10. The Executive shall exact from the undertakers, all the necessary securities for completing the work.

ART. 11. No contract which the Executive may make, can take effect without the approval of the Legislature.

BOGOTA, May 22, 1834.

[Signed by the proper authorities.]

Decree of the Executive for carrying the above Legislative Decree into effect.

I, Francisco de Paula Santander, President of the Republic of New Granada, in execution of the Legislative Decree of the 25th inst., authorizing the Executive to receive proposals for opening a road in the Isthmus of Panama, from the Atlantic to the Pacific, and fixing certain points, according to which, the contract is to be made and privileges granted to those who may undertake the said important work:

Considering that a period should be fixed for receiving proposals, after which the contract should be made with, and the privileges granted to, the person who offers the most advantageous conditions and the best security for their performance,

DO DECREE,

ART. 1. Those persons, whether natives of New Granada, or foreigners, who, in virtue of the Legislative Decree of the 25th inst. may wish to undertake the construction of a road across the Isthmus of Panama, either for ordinary carriages, or a rail road, and to secure the privileges which are to be the remuneration for their labored expense, will send their proposals, sealed and under cover, to the Department of the Interior and Foreign Affairs, before the 15th of January, 1835.

ART. 2. Those who may send such proposals, must appoint some one in this capital, with power and authority to sign the contract offered. The same person must be furnished with the means of proving that he who offers to undertake the work can carry it through, in case he receive the privilege.

ART. 3. In the envelope of each set of proposals, shall be written the object of the paper enclosed, and

the name or names of the persons desiring to undertake the work.

ART. 4. After the 15th of January, a day and hour shall be fixed for opening the said papers, at the Department of the Interior and Foreign Relations, in presence of the respective attorneys or agents, and the contract will be signed with the person offering the best conditions and the strongest security, which contract will be submitted for the approval of Congress at its ensuing session.—*Bogota, May 29 1834.*

FRANCISCO DE PAULA SANTANDER, President.
LINO DE POMBO, Secretary of the Interior, &c.

Patent for an Improvement on the Mode of fixing Valves on the Boilers of Steam Engines. Granted to DAVID B. LEE, city of Philadelphia, January 23.

The safely valve here patented is, we are informed, "a fixture for boilers for steam engines, to prevent *collapsation*, resembling the common safety valve, except that it opens in by the pressure of the atmosphere." And "the part claimed as an invention, or discovery, is not the particular form of the valve, but the general plan of fixing a valve, or valves, to boilers of steam engines, which shall open with an external pressure, to prevent *collapsation*."

A very little reading would have shown to the patentee the antiquity of his invention, as an account of it may be found in most, if not in all, of the numerous histories of the steam engine. We could take from our shelves a dozen books from which to quote upon this point, and could refer to numerous patents in which such valves are noticed. In the article *Steam Engine*, in Rees' Encyclopædia, after speaking of the safety valve in Watt's engine, it is observed, that "there is another valve of safety for the reverse of the object of the first mentioned safety valve; it opens internally, and is balanced by a small lever, and a sufficient weight to keep it shut, until the pressure of steam within the boiler becomes much less than the external air, which then forces open the valve, and enters into the boiler till the equilibrium is restored. It is evident that this valve can never be necessary so long as the engine is at work; but its use is to prevent the sides of the boiler being crushed in by the weight of the air, when it has done work, and the steam within it cools and condenses."

This kind of valve has, in fact, been applied to hundreds of boilers, stills, &c. With the kind of boilers which we now ordinarily use in steam engines, valves of this kind are not employed, for the simple reason that they would be of no use. Our cylindrical iron boilers do not collapse by the pressure of the atmosphere, which they would be able to sustain, even if perfectly exhausted; nor is the collapsing which frequently takes place, a collapse of the boiler, as the patentee appears to suppose, but of that of the flue which passes through it, and which is forced in, not by the pressure of the atmosphere, but by that of high steam, occasioned in general by the water being allowed to descend too low, which admits of the heating of the upper part of the flue, and the consequent diminution of its strength; it then yields readily to a pressure, which, under ordinary circumstances, it would have sustained most effectually.—[*Journal of the Franklin Institute.*]

SCOTLAND.—HISTORICAL MEMORANDA.—No country has made more progress in agricultural improvement, and in multiplying the comforts of life, than Scotland during the last fifty

years. The Rev. C. Peebles, in his statistical account of Mains, in Angus, draws a curious comparison between the farmers in 1760, when he came among them, and 1790. The following are a few points:

1760.	1790.
Land ploughed with oxen. Only a few horses kept to draw the harrow in seed time, and bring in the corn in harvest. 71. thought a great price for a horse.	Oxen not employed in agriculture. Farmers have their saddle horses, worth from 24 to 30 <i>l.</i> , and work horses from 20 to 25 <i>l.</i> each.
Land rented for 6 <i>s.</i> per acre, and only two small farms enclosed.	Land at 30 <i>s.</i> and all enclosed with dykes and thorn hedges.
No English cloth worn but by the minister and a Quaker.	There are few who do not wear English cloth, and several the best superfine.
Men's stockings were what were called plaiding hose, made of woollen cloth. The women wore coarse plaids. Not a cloak or a bonnet was worn by any woman in the whole parish.	Cotton and thread stockings are worn by both sexes, masters and servants. The women who wear plaids have them fine and faced with silk. Silk plaids, cloaks and bonnets, are very numerous.
Only two hats in the parish. The men wore cloth bonnets.	Few bonnets are worn, and the bonnet-maker's trade is given up.
There was only one eight-day clock in the parish, six watches, and one tea-kettle.	Thirty clocks, one hundred watches, and above sixty tea-kettles.
The people never visited each other except at Christmas. The entertainment was broth and beef, and the visitors sent to some ale-house for five or six pints of ale, and were merry over it without any ceremony.	People visit each other often. Six or seven dishes are set on the table differently dressed. After dinner a bowl of rum punch or whiskey toddy is drank, then tea, then another bowl, then supper, and, after that, the grace drink.

A new work.—Major HENRY LEE, of Virginia, has, we learn, been for some years past engaged in preparing, with great labor, from a rich store of materials, a *LIFE OF NAPOLEON*. From the following announcement in *Galignani's Messenger* of June 19, we learn that the first volume of the work has gone to press at Paris:

"In the press, and very shortly will be published by A. and W. Galignani & Co., No. 18, rue Vivienne, the first volume of the 'Life of the Emperor Napoleon, with an appendix, containing an examination of Sir Walter Scott's 'Life of Napoleon Bonaparte,' and a notice of the principal errors of other writers respecting his character and conduct; by H. LEE.

"Vir neque stultus,
Neque dicendus sine cura,—aliquando
Fortuna, semper animo maximus.
Vell Paternus. 1. 2. c. 18.

"Quelques parcelles de tant de gloire parviennent-elles aux siècles à venir? ou le mensonge, la colonnie, le crime, prévaudront-ils?"

Napoleon à Ste. Helena.

The distinguished literary ability of the author, with the great advantages which he has enjoyed over every other biographer, and his freedom from any thing like national prejudice in reference to the history of the career of NAPOLEON, will give an interest to this over most other histories of the Revolutionary era, the civil reforms which preceded it, and the gigantic wars in which the power of Napoleon was overthrown. We learn from a friend at Paris, that "Major LEE has devoted himself, with untiring diligence, to the pursuit of truth in regard to the object of his work. His inducement to this publication has not been so much the desire of gain, or the promise of literary fame, as the hope, the great and only hope, that he may prove instrumental in vindicating from unparalleled injustice the fame of the greatest man, of whom the history of the human race preserves any record; a man whose career was one continued opposition to the worst passions, and active promotion of the best interest of his country and his species—who never really believed an enemy, nor betrayed a friend." Such are the enthusiastic terms in which one, who has watched the progress of Mr. LEE's work, speaks of the subject, and in which probably Mr. LEE would himself speak of it.

We suppose it will not be long, after the publication of the work at Paris, before copies of it reach this country; when we shall endeavor to make our readers further acquainted with it.—[*Nat. Intel.*]

Whale ships at the Sandwich Islands.—The *Sailors' Magazine* for August contains a long communication from Wm. Richards and Ephraim Spaulding, Missionaries at Lahaina, (Sandwich Islands,) from which it appears that the first whale ships which ever visited the Sandwich Islands, were the *Balena*,

Captain Gardner of New Bedford, and Equator, Capt. Folger, of Nantucket. This was in the autumn of 1819. While lying at anchor in Kealahakua Bay (Hawaii), they took a large whale which made 110 hbls. of oil. Since the autumn of 1823, a complete list has been kept by the Missionaries, of the ships which have recruited at Lahaina, (Island of Maui,) and probably still greater numbers have recruited at Honolulu (Island of Oahu.) The whole number at Lahaina from the middle of 1823 to the end of 1833, ten years, is 514, including 218 different ships. In the spring of 1831, there were 38 ships at anchor in that harbor at one time. The number of ships which recruited there in 1833, was 82; 30 in the spring, and 52 in the Fall. Aggregate of oil on board, at the time of their calls respectively, 74,390 bbls. Aggregate taken by the 52 autumn ships during the season, 27,340 bbls., averaging for each ship a little more than 525 bbls. "From these facts," say the Missionaries, "it will readily be seen that, though the average quantity taken by each ship the past season is less than in some former seasons, the whale fishery is still in a very prosperous state; and considering the great demand for Sperm oil in America and Europe, it was never more profitable."

The number of seamen generally in port, rendered it desirable, in the view of the Missionaries, that a reading room should be provided for their accommodation; and accordingly a building has been erected, 32 feet by 20, on the missionary premises, for masters and officers, and another about 10 rods distant, 24 feet square, for the crews. The first cost of the buildings was about \$720; of which \$200 was paid by the Missionaries, \$215 by ship-masters, and the remainder, it was presumed, would be contributed by other ship-masters, as they should successively arrive in port. "As it regards social intercourse between the Missionaries at this station and seamen during the past year," says the letter, "it has been uncommonly cordial and pleasant. Masters generally have been very kind, and some in addition to their subscription for the reading-rooms, have been generous in making us presents of such things as were necessary in our families, an acknowledgment of which we shall gratefully make to the American Board."

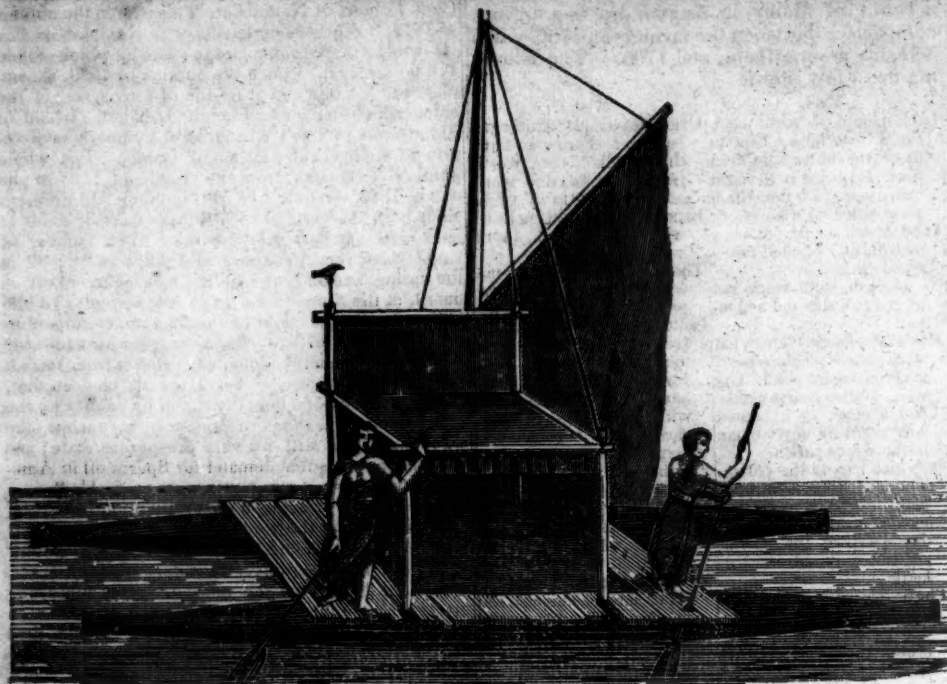
Population of Utica.—A census of this city has just been taken under the direction of the Common Council, and we are highly gratified in being able to give the following as the result:

First Ward,	1,495
Second do.	1,882
Third do.	2,764
Fourth do.	3,978

Making the aggregate ten thousand one hundred and nineteen; which is the population of Utica at this time. The number of inhabitants in this city, according to the census of 1830, was eight thousand three hundred and thirty-three; which shows an increase, within the last four years, of eighteen hundred, lacking four. This result is the more gratifying, as it is, in a degree, unexpected. Some persons, whose apprehensions are always rather lively, have been in the habit of *croaking* about the "prospects of Utica." The facts, however, instead of warranting any complaint on our part, are calculated to inspire the highest confidence in the stability of our city—as the census just taken exhibits an increase in the four last years, of nearly 22 per cent. in our population. For the next four years, our growth will undoubtedly be still more rapid, as the termination of the public works at this city, now in progress, will not only furnish employment to an increased population, but will warrant the erection of additional buildings, and give a stimulus to enterprise in every form.—[*Oneida Whig.*]

THE DISTANT HOME.

Once on a cloudless summer's eve,
I stood on Snaefield's island steep—
The light which dying sunbeams leave,
Was fading from the western deep:
The mountains of my native land
Rose dimly o'er the distant sea,
Whose waters press'd the golden strand
In sunset's blue tranquillity.
No sound was on the breezeless height,
Save the glad voice of infant rills,
Which wander'd in the wailing light,
Rejoicing down the pleasant hills;
Though faint and far the day-light burn'd,
And gray mists chill'd the desert air,
To western skies I fondly turn'd—
My homeward gaze still rested there.
And thus, methought, the child of faith,
When joys depart and hopes decline,
Sees, rising o'er the gulf of death,
Unfading kingdoms brightly shine;
The cloud which veil'd the surging wave—
The blast which raised the breaker's foam,
Pass off, and show beyond the grave,
The glories of his radiant home.

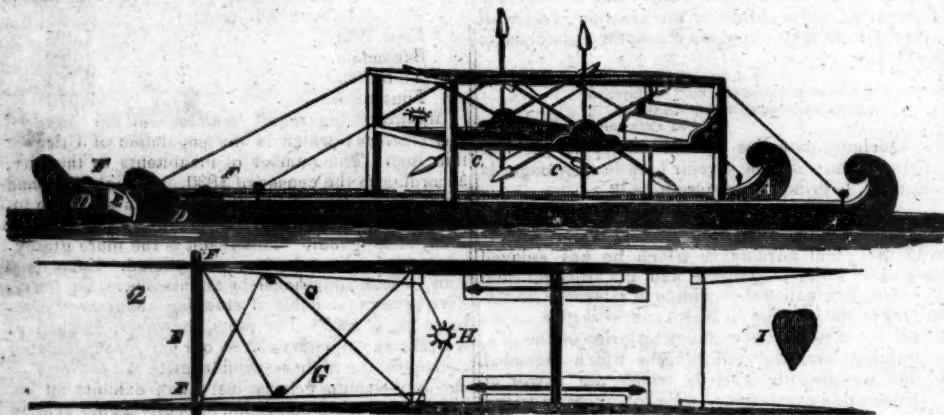


A DOUBLE CANOE OF THE FRIENDLY ISLANDS.

[From the *Mechanics' Magazine*.]

The great utility of Mr. Burden's plan, or invention, or adaptation to navigation, (we hardly know what to call it,) has called forth a host of competitors, all desirous of proving that they had the same plan already prepared to come out with when an opportunity should occur which they might consider advantageous. We insert Mr. Canning's claim, and shall, next month, insert some

others, introducing now an engraving, handed to us by an esteemed friend, of a boat in use at the Friendly Islands, so long ago as 1798, of a similar construction. It is copied from an engraving in Labillardiere's account of a voyage in search of La Perouse, the French traveller. Monsieur Labillardiere states that a great number of the natives came out to them in boats constructed in a similar manner.



CANNING'S DISPATCH-RAFT.

A A represent floaters. B, the deck. C C, paddle wheels. D D, rudders, connected by E, a board about 7 inches wide, with a hole near each end, into which insert the nipples, F F. F F, G G, till ropes, which pass over H, the tiller wheel. I, cross-section of floater or trunk.

In order to give a due degree of buoyancy to the floaters, I had them hollowed into chambers of 14 inches long, 10 inches deep, and 4 inches wide, leaving solid parts of 3 inches between. This raft was destroyed while afloat on the Seine river, (owing to the culpable negligence of the person who had it in charge,) by a loaded barge, which came in violent contact with it. I shortly afterwards constructed another upon the same principle, but much larger, and instead of floaters, similar to the first, made use of troughs formed of half inch deal boards, which I found also to answer well. When

my raft was almost finished, as I was one day trying its rate of going, opposite the Champs Elysees, in company with a friend, and my little son (about three years old), a French steamboat, on board of which was the proprietor and a large party, evidently quitted its original course, dashed with tremendous force upon the starboard quarter of the raft, and broke it up in a twinkling, submerging the deck, upon which the child was placed, who, but for instant vigorous exertion, would, with my friend, have been drowned, as the current runs with extreme rapidity in that part of the river. My friend and the youth were received on board by the steamer. I preferred remaining upon the wreck, which I with difficulty got ashore, at a considerable distance from where the collision took place.

I soon after re-constructed my raft, and substituted for the troughs a double row of

small barrels, twenty-eight in number, varying in size, placing the largest the fourth from the bows; these I boarded over with half inch deal boards, forming long staves, which were screwed down to the barrels. The ends of the boards projected beyond the barrels at both ends of the trunks, so as to form stems and sterns. The interstices, between the heads of the barrels and the outside planks, were filled up with a mixture of pitch, tar, cork shavings, saw dust, and resin.

This raft was greatly admired. I had the honor of receiving our veteran hero, Sir Sydney Smith, with a host of distinguished English and French, on board at various times, who all seemed to approve highly of the principle upon which it was constructed—considering that it would insure personal safety in an eminent degree, as it was neither liable to sink nor upset, while its rate of going was much greater than any other sailing craft, and it afforded an incomparably more commodious place for passengers than a boat of ordinary build.

I next contemplated the construction of a still larger raft, to be propelled by steam, but, for the reasons already assigned in my former communication, I was not able to procure permission from the Prefect of the Seine. I soon afterwards sold my raft to Colonel, now General Trobriand, and Mr. Mallet, to run as a pleasure raft upon the celebrated lake of Montmorency.

The 20th of last December, (consequently prior to any account of the raft constructed by Mr. Burden being received in this country,) I commenced the construction of a small raft of the kind for my own use, to run upon the Thames. It is almost finished, and would have been some time back, but for circumstances not connected with the affair.

I remain, sir,

ALFRED CANNING.

Crown Coffee-House, Holborn, April 17, 1834.

AERIAL STEAMBOAT.—We find the following in the Cincinnati Daily Gazette.

Mr. Editor,—Perhaps it is not generally known, that one of our ingenious citizens has invented, and has now in preparation, the model of an aerial steamboat, in which he proposes to ascend.

Although but little expectation of the success of the experiment is entertained by the writer of this article, it is worthy the attention and examination of the scientific. The inventor, Mr. Mason, is very sanguine, having already made (to him) a satisfactory experiment.

The boat is about ten feet long, the ribs being covered with silk, in order to render it very light. The engine, of two horse power, is placed in the middle, and turns four vertical shafts projecting over the bow and stern, into each of which are fixed four spiral silken wings, which are made to revolve with a sufficient velocity to cause the vessel to rise. Over the whole is fixed a moveable silken cover, designed to assist in counteracting the gravitating force, at the same time tending to assist in its propulsion forward.

The whole boat, including the engine, weighs 60 pounds, and has cost about \$300. It is the design of the inventor to attempt an aerial excursion, of which due notice will be given.

J. L.

AGRICULTURE, &c.

DISEASES OF SHEEP AND COWS.—Sheep and cattle, like the human family, are subject to a variety of diseases: but it is not my intention to notice more than one or two. There is a disease to which sheep are subject, that is probably more destructive to them than is generally supposed—that of the worm in the head. I have not unfrequently had sheep that were fat, that looked healthy and well, to sicken and die in the course of a few days; and under the impression that they had eaten something poisonous, such things were given them as are generally recommended in books for poison, but with no advantage. Having purchased some Bakewell and Southdown sheep at from \$20 to \$30 each, has probably induced me to pay rather more attention to my sheep than otherwise I should. One very cold day, winter before last, I saw a half Bakewell ewe standing in the snow about fifty yards from a shelter that had been erected for my sheep, and under which they had usually slept. Her head was down, and occasionally she moved a little. Supposing that she had a young lamb, I walked that course with a view of having the lamb moved to the shelter; but as I approached her, she did not appear to observe me. I took hold of her and she appeared too stupid to notice it. Her head was inclined a little to one side, her eyes glared and appeared almost fixed in their orbits. She was found too stupid to be driven to the fold, and had to be carried. She lived several days; at first she had slight spasms, and foamed a little at the mouth, but after a day or two, she was more convulsed, and would fall down, but would again get up. Supposing her head to be the seat of the disease, after her death it was dissected, and a worm was found in one of the nostrils, a little below the eye, about an inch in length and a quarter of an inch in thickness. Supposing that one alone had killed her, very little examination further was made. In January last, two sheep on the same morning appeared to be sick, one a ewe of the common breed, in fine order, the other a half Bakewell ewe, and fat. The common ewe held her head as high or higher than usual, with it a little inclined to one side, the eyes resembled those of the one already described: on approaching her, she appeared a little stupid, would suffer me to approach very near, and then suddenly dart off as if she had just perceived me. The other held her head rather lower than usual, and suffered me to approach her rather nearer than the other, and appeared more stupid and sick, with no glaring of the eyes. Next day both of them were evidently worse, and the common ewe disposed to hang her head; and on the third day she laid down to get up no more. The glare of the eyes continued, the pupil became enlarged, spasms came on, and a little foam was observed about the mouth. The spasms were first observed to throw the left ear in motion, then the left eye lid, quickly after which it appeared all over the face, head, and neck, but as she was lying down the force of the spasms upon the body could not be seen as upon the one the winter before. The morning she died, I was about leaving home when I was informed she was dead; but I requested her head to be examined to see if any worm could be found. On my return a worm was brought me, about the size of the one already described, and it was stated it was taken out of the head between the eyes. I think it not improbable there might have been many more. The half Bakewell appeared more stupid and sick every day; and held her head lower and lower, until her nose almost rested on the ground as she stood up. I saw her but a few times after the death of the other, but I think towards the last, the symptoms were very much like the other two. About a day and a half after the death of the other, I was informed the half Bakewell was dying. As night was fast coming on, and the weather was extremely cold,

it was thought best to have the sheep killed and skinned while warm, after which the body was examined, but nothing found amiss. It was getting too dark to dissect the head, and that was laid by for morning. In dissecting, it was found filled with blood, having been knocked on the head with an axe to kill it. Under this disadvantage it was dissected, and from the head were taken nineteen worms. Some were found high up the nostrils, some in the different cavities of the head, and one large one was found lying on the thin membrane that envelopes the brain; they were of all lengths, from a quarter of an inch to an inch. They were placed upon a piece of paper, and none appeared to be alive: but afterwards, while looking at them by the fire, many were found to move. It appears strange that so many should have been found in the head of one sheep, and that one quite fat. Whether it was their particular location, or like the grubs in the horse, they remain for a time peaceable and inoffensive, and then suddenly destroy life, I must leave for the reflection of others. The worm is supposed to be the produce of a fly which deposits its eggs a little within the margin of the nose, to avoid which is the cause why sheep gather together, and turn their noses inwards. Daubing the nose often with tar or train oil is said to be a preventive. About a table spoonful of a decoction of Scotch snuff injected up each nostril with a syringe, three or four times from the 1st of October to the 1st of January, is said to be a good remedy, but is apt to make the sheep very drunk for some time. I cannot say I have much confidence in either the preventive or remedy proving effectual.

I will now notice one disease to which the cow is subject, that of an inflammation of the udder. I have frequently heard it stated, that it is produced from the snake sucking the cow. The snake is supposed to be fond of milk, but as to any familiarity between the snake and the cow, I have never believed in it. The snake is more like Ishmael of old, whose hand was "against every man, and every man's hand against him." This disease is not very uncommon to cows. A few years past, one of the finest cows upon my farm (a half Durham) became diseased in one quarter of her udder, and not knowing at the time the cause or remedy, that quarter gradually perished away, and has never since produced milk. To show the cause, the symptoms, and cure of this disease, I will make an extract from a treatise on stock, which was published in England, by J. B. Lawrence, and which has recently been republished in this country.

"Downfall, udder-ill, inflammation of the udder, &c.—From what we have said of the digestive process of the cow, and the intimate connection between the fourth stomach and the udder, the reader will be at no loss to understand that when that is out of order, the udder, and consequently the quality and quantity of the milk, must be materially affected. These, or rather this complaint, for they are all one, or different stages of the same disease, of which the predisposing cause was bad feeding, and the exciting cause a cold or inflammation of the udder, is essential to be taken in time, and of the utmost consequence to the owners of young cattle, which are very liable to its attack, especially at the time of calving."

"Cause.—This disease may not only proceed from the above causes, but may also be induced by the animal drinking freely of cold water, when heated by exercise, or by cold exposure, and lying down in cold and damp grass at the latter end of the year, when the nights are cold and foggy, and at a time when the stomach is loaded with food, and the blood plentiful."

"Symptoms.—One or more quarters of the udder become swollen, hardened, hotter than common, and painful when pressed; the milk is reduced in quantity, and changed to a ragged, or bloody, or corrupt appearance. At other times, the secretion of milk is stopped,

and the tumefied quarter proceeds to a state of suppuration."

"Cure.—As soon as the disease is discovered, remove the animal from the pasture, and take from her from three to five quarts of blood; especially if the cow be in good condition, and breathes quickly, and appears stupid." "If the weather be damp and cold, keep her under shelter, and feed her moderately with nourishing food; but if the weather be fine, turn her into a bare pasture, where she will be obliged to exert herself for her food. The swollen udder, or rather that part of it which is affected, (for there is seldom more than one part or quarter affected at a time,) should have the bad milk drawn from it three or four times a day; for if suffered to remain in it, it will irritate and increase the inflammation. Bathe it also after milking with olive oil, or elder ointment."

The same writer recommends medicine to be given internally. His doses are compounds, and the ingredients are not generally kept by farmers, but as epsom salts enter largely into some of them, I imagine they would answer alone. My own impression is, that the best care would be to let the calf run with the mother during the continuance of the inflammation, provided it would suck all the teats.

Extract from the same writer:

"Sore teats.—Some cows are very subject to sore teats, particularly such as have newly calved; if this be the case in summer, they often become ulcerated, and the flies plague them to a degree which renders them extremely difficult to milk: it is also a great nuisance at the time of milking, as blood and corrupt matter are apt to pass between the fingers into the milk. The following liniment is very useful for anointing sore teats, and should always be kept in readiness for use:

"Ointment of elder four ounces, yellow basilicon ointment four ounces, spirits of turpentine one ounce, mix and well incorporate them together on a slab, and it is fit for use."

"With this ointment you may well rub the cow's teats every night and morning after milking, if in the summer assafetida or aloes in powder, and dissolve it along with the ointment. This will prevent the flies from teasing the animal. If the teats be tender only, and not sore, a little gentle rubbing with weak salt and water will in general be sufficient." Finding it inconvenient to prepare the ointment exactly as directed in the foregoing receipt, a handful of the inner bark of the elder was taken and simmered in hogs' lard. Six ounces of the elder ointment was then taken, and while it was warm, one ounce of bees wax and one ounce of turpentine were added, and melted together. After being stirred awhile, the turpentine mostly sunk to the bottom and was thrown out: one ounce of spirits of turpentine was then added, and the whole stirred as long as it was in a liquid state. After the ointment was made, a little boy that had fallen to sleep in the room was waked up to go to bed, he was found unable to walk without assistance, in consequence of his feet being so much chopped and inflamed; they were rubbed with the ointment, and by the morning there was no appearance of inflammation, and the skin was soft and supple, and they soon got well. Though this ointment is not prepared in the way directed, the same ingredients are used and almost exactly in the same proportions. It is an excellent ointment for man or beast, and should be kept in every family. EDMUND F. NOEL.—[Farmers' Register.]

[From the New York Farmer.]

STEAM APPLIED TO AGRICULTURAL PURPOSES.—We have heretofore expressed our opinions on this subject. We now state, that if the scientific ingenuity and the capital of this country could be combined, and steam immediately applied to agriculture—and that, if prejudices should retard its application in Europe,—we

should, in comparatively few years, cause every principal nation in the world to crush by the weight of their own institutions. But Europe will, and must, have the plough driven by steam. From an article in the Quarterly Journal of Agriculture, we make the subjoined extracts.

From the Parliamentary returns, the horses running in coaches in Great Britain, in 1823, amounted to 178,841; and we are perhaps much within the mark when we suppose that these, with all the horses employed in drays or draught, exclusively amount to 600,000. It is said by some, that each horse consumes what will support eight individuals. The suppression, therefore, of these horses alone, (which does not include one horse employed in agriculture or for pleasure,) will save what will feed 4,800,000 people. The annual consumption of grain, by human mouths, in Great Britain, (viz. 16,000,000,) is about 32,000,000 quarters, of which not one-twentieth part has, during any year, been imported. But the saving of what would feed, by the removal of the horses used for transit alone, 4,800,000 people, amounts to more than what is consumed by the fourth part of the said population. If importation of grain, then, to the very limited extent of one-twentieth, viz., 1,600,000 quarters, has hitherto been deemed an evil of no little magnitude by the agricultural interest, what will they consider a system which will abridge home consumption equal to one-fourth, viz. 9,600,000 quarters? At first sight this will appear to the agriculturist as involving more certain and complete ruin than even that which would follow the repeal of the corn laws. But this is taking a narrow, a prejudiced view of the matter:

The application of steam to purposes of husbandry will so cheapen the cost of production, as to reduce the price of food with remuneration to the growers. It is well known, that the expense of horses forms the principal item in the outgoings of the farmer. The late Dr. Colquhoun, so far back as the year 1812, in the estimate which he makes of the new property created annually in Great Britain and Ireland, taking each kind of grain at 50 per cent. less than the average prices in the public markets of the 12th September, states the crop of hay, grass, straw, and vetches, as amounting in value to £89,200,000.

And the portion of this consumed by horses was as follows:

Horses in Great Britain and Ireland, estimated at 1,800,000, at 45s. each for grass,	£4,050,000	0 0
For hay, at £6 each, - - -	10,800,000	0 0
For straw, at 5s. each, - - -	450,000	0 0
For beans and peas, - - -	2,640,666	13 4
No separate item is given for corn, but taking the half of that consumed by animals generally, as consumed by horses, viz., £14,790,000,	7,395,000	0 0

We have - - - £25,335,666 13 4

—which is subtracted from the above, purely to support the brute labor which it is now possible to supplant, in a great measure, by steam. When it is farther considered how much horses have multiplied since the period mentioned, it is perhaps speaking greatly within bounds, when we suppose they are maintained at a yearly expenditure of £30,000,000. It is not difficult then to perceive, how the suppression of horses, either in whole or in part, will economise a saving in farm management sufficient to effect a great cheapening of agricultural produce with advantage to the producer, and benefit to the consumer.

Though difficulties exist in the minds of agriculturists, who have not turned their attention to the subject, as to the possibility of extending steam to husbandry purposes, no difficulties exist in the opinions of many eminent machinists who have turned their attention to

it. We have had conversations with several patentees, who have each assured us that there are no practical difficulties in the case, provided there was any inducement for them to direct their skill to such a species of machinery. Mr. Phillips' getomic apparatus, the model of which we have seen, though far from being a perfect machine, is yet sufficient to show that a little farther simplification is all that is required to render it such. We are happy to say, that, in our notions respecting steam-ploughing, whether as regards its practicability or importance, we are corroborated by a Fifeshire farmer, who, in a letter of the date 24th December, 1833, published in the Fife Herald, remarks, "that at present, when the ingenuity of man is upon the stretch to devise means to abridge human labor, and add to the comforts and intelligence of a redundant and still increasing population—when, by our absurd laws, the manufacturer is under the necessity of giving an extravagant price for the first necessities of life—when industry is fettered, and the growing resources of the country are circumscribed, our tenantry wasting their time and means, and crouching under the power of their proprietors, on account of a corn monopoly,—I wonder it never struck some of our agriculturists that they might, like the manufacturers, endeavor to undersell their neighbors, and drive them out of the market. I know it will be said, that it is impossible—but what I am going to suggest is a farther extension of machinery, to assist us in keeping ourselves ahead of our neighbors, and that is the application of steam to the working of ploughs. At present, it requires nearly the half of the produce of a farm to pay the necessary expenses, and a great part of that goes to the keeping of horses, harness, &c. Now, if the farmer could get a steam-engine to work his ploughs, harrows, and rollers—thresh and shear his corn—cast his drains, and rid his land of large stones,—he would be able to pay his present rent, although there were no corn-laws, and grain one-third cheaper than it is."

We have gone into this detail, not because we advocate the application of steam to general locomotive purposes, merely from the love of change, without any other reason than that change is the order of the day: no, but because there are numerous weighty, and what ought to be imperative reasons, for the agricultural classes giving this matter their deep and serious attention. From the whole course of events, no man can be so blind as not to perceive that, upon the subject of the corn laws, the agricultural and manufacturing classes are about to come shortly into a fearful collision. Cheap bread is a thing that our starving and oppressed people must have, either by a cheaper system of cultivation at home, or by importation of corn from abroad. The alternative is the choice between the life and the death of the State. For surely it is madness amounting in degree to theirs whom the ancients conceived were doomed to perish, to suppose that cheap bread, by a method that will ruin our domestic agriculture, will not precipitate the country into that state of social disunion which the whole tendency of our affairs shows to be in course of progression. Now, let it be supposed that steam has had nothing to do in maturing this condition. During the last quarter of a century, it has been applied to what may be called *physical* purposes only, i. e., to purposes which have materially abridged manual labor, and multiplied almost indefinitely every species of commodity, whilst it has not been applied to any one purpose that has increased human labor, or saved the consumption, and cheapened the production of food. Consequently there has been a gradual disapproprimation between the necessities and the conveniences of life, until, after nineteen years of peace, and what ought to have proved financial recruitment, it has reached an extent which has unbalanced consumption and production to a degree which is paralyzing all commercial and agricultural transactions, fearfully increasing pauperism and crime,

fomenting sedition, and threatening the peace, order, and best interests, social and civil, of society.

The extension of steam to *economic* purposes, i. e., to purposes which will permit the removal of brute labor, will remedy the evils arising from its partial application; for, as we have shown, it will save and cheapen food, and that by a way which, over and above its improvement of internal communication, will improve the coal trade and iron trade, those pillars upon which the prosperity of the country is said to rest, as well as every department of manual industry. Applied exclusively to physical purposes, machinery as yet has, with all its advantages, been attended by evils far from being partial. Extended further to economic purposes, the good that will follow will not be short of universal. Hitherto its abuse, that is to say its former application, alone has been pernicious; now its use, that is to say, its latter application, will be commensurately beneficial. Machinery has made goods,—machinery also must make a market. The existing circumstances of society demand this, otherwise all will terminate in convulsion.

There is not a laborer in the three kingdoms who does not feed his belly at the expense of his back. This is an evil of no trifling character, for it is one which affects the entire industry of the country; and farther, it is one which, for the interest of all parties, ought to be removed without loss of time.

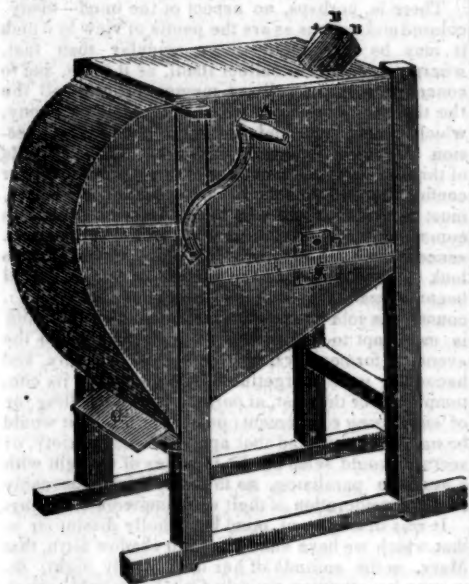
In order more effectually to promote this object, and carry the project extensively into operation, a NATIONAL INSTITUTION OF LOCOMOTION, unconnected with any trading company, is now in progress of being formed to promote the application of steam to general purposes of transport and husbandry, and to supply the desideratum which has long been experienced of there being no metropolitan association, in connection with the various companies and local societies throughout the united kingdom, formed for the advancement of commerce and agriculture.

When we consider how exigent is the want which steam applied to economic uses is commissioned to alleviate, and how reckless in its consequences, as that volcano indicates whose eruptions are now nightly visible in the farmyards of some district or other of the country, we consider it fortunate that, if CHEAP BREAD be wholly unavoidable, it can now be procured in a way that makes it wholly desirable. The bane of having prices reduced by steam transport, and the antidote of providing for the same by steam husbandry, are both before our agriculturists. We cannot suppose that they will allow the one to be introduced unaccompanied by the other. In the hope that this will be the case, we cannot conclude this paper without congratulating all orders of our fellow-subjects upon the bright prospects which the general application of steam to brute labor purposes opens upon us. At a moment when the resources of the country are no longer adequate to the wants of our population, "WHEN A RESTLESS SPIRIT OF DISCONTENT IS EVERYWHERE ABROAD," and cheap food of home growth is a *sine qua non* to an ameliorated condition, this beneficent agent steps in to accomplish what could not have been effected by any external process whatever. The speedy and general introduction of steam cultivation is all that is required to make cheap bread in Britain, in a way that will reduce no one to destitution in Britain. If our industrious classes must still earn and eat their bread by the sweat of their brow, they shall nevertheless eat it in plenty, and in contentment. Under the social economy which the extension of steam to the purposes of animal labor will allow, it shall no longer be said that the wealthiest empire in the world is also the most wretched one, or that, with all our boasted wisdom in science and art, we are unwise in that which not rightly to know is misery and unhappiness! The better policy of the age of steam must be to make millions rich instead of the units,—to render monopoly the property of the state and

not of the stock-jobber,—to comfort a thousand happy homes, instead of building up one bloated capitalist. Steam, which, confined to physical purposes, hitherto has wrought such marvels, extended further to economic uses, can achieve all this, for by *home means*, equalizing the price of necessities and conveniences, it WILL ADJUST PRODUCTION AND CONSUMPTION; the unbalanced condition of which alone has deranged the currency,—paralyzed transaction,—abridged industry; and, in a word, occasioned all those evils which at length have produced a nation divided into usurers and paupers, to the danger alike of the constitution, the altar, and the throne.

R. B.

Corn-Shellers, Corn-Crackers, and Turnip-Cutters. [Communicated for the New-York Farmer and American Gardener's Magazine.]



Among the machinery which mechanical ingenuity has furnished the farmer, to expedite farming operations, is the Corn-Shell. They are constructed to shell either one or two ears at a time. They require two persons, and will shell perfectly clean, and nearly as fast as one can put in the ears; consequently the number of bushels in a day must be very considerable. Some of them, as in the present drawing, have the shelling apparatus incased, to prevent the corn from being scattered. B B are the two openings into which the ears are dropped; A, the turning crank; C, the opening at which the corn comes out. The prices for substantial built machines vary from 8 to 15 dollars.

H. Huxley & Co., 81 Barclay street, have affixed to the Corn-Shellers a simple apparatus for cutting turnips and potatoes for stock. They are also appending one for cracking the corn.

THE WILD OR CANDLEBERRY MYRTLE, A REMEDY AGAINST THE WEEVIL.—[We should suppose myrtle equally beneficial to wheat.]

Dear Sir,—Information on all and any subject, connected with agricultural pursuits, will, I presume, find admittance into your periodical, and although the notice may be of apparently small matters, yet to some one of your readers it may be new, and let me add, valuable. I am induced to make these remarks from the inconvenience I suffered for many years, from the destruction of my corn by weevil, and the total absence of them now, in consequence of the application of a very simple remedy. The land which I plant in corn is low, and requires almost as much draining as the river lands, but is productive, and yields abundant crops. Whether

it is owing to the location of the land, or other (to me) unknown causes, I am unable to say, but the fact is, that the corn is often taken from the field with a great many weevil in it. No injury seemed to result from their residence in it, while in the field, or during the cold weather, but as soon as the summer's sun had shed his genial warmth upon us, these intruders gave notice of their existence, by commencing the work of destruction. Upon several occasions my provisions were materially injured, and much complained of by the consumers. I tried a variety of remedies, without effect. Late planting, and early planting, were both suggested and tried; the land was all broken up deep in the winter with a plough; the seed was coated with tar and soot, and finally was brought from one of the sea-islands at a distance and planted. The crops, I think, were improved by each of the remedies in quantity, but the enemy still retained his position, unmoved, and apparently immovable. I was one day mentioning the circumstance to a friend, who told me that he had understood that the wild myrtle, (*Myrica cerifera*), was a sovereign remedy for this seemingly incurable disease. At this time the destruction had commenced, and the insects were to be seen in every direction; a quantity of myrtle was procured, and spread over the top of the corn, and directions given to follow it up, if any effect was visible. My removal to town for the summer prevented my attending to the business any farther, and I learned upon inquiry in the fall, that "it seemed to check the weevil in some degree." This was not satisfactory, and as the corn in the field was apparently more than usually infested, I determined to give the experiment a fair trial. The corn-house was emptied, and swept, and washed with boiling water; the floor was then covered with myrtle; a layer of corn about a foot deep was then brought in, and then a layer of myrtle, and this management continued throughout the whole harvest, observing to cover the top of the corn with a bed of these little bushes. During the winter I several times examined the corn, near the door, and saw no weevil, yet I was fearful, that in the body of the house the mischief might still be going on. Late in the spring we began to use the corn freely, and still found no weevil; the crop was eventually consumed, and was to the last entirely free from insects of all and every kind.

This was to me satisfactory, and the rule has been uniformly observed of strewing the house with myrtle, and no weevil have since been seen. My corn-house is divided into two bins, and an entry; and this year I had planted a small field alone, and desired that it might be kept separate. Into this entry it was thrown, and no myrtle was put with it, but the two bins were as usual well supplied. Upon my examining the corn-house, I found the corn in the entry filled with weevil, while that in the bins was perfectly free from all insects. The corn was immediately removed, and though filled with insects, was divided between the two bins, and myrtle plentifully strewed over the top of each. I am now eating the corn, and the weevil are no where to be found.

This last accidental experiment is more convincing than either of the others; here the two bins were free from weevil, and the corn which was separated from them, only by a loose board partition, was filled, and I have little doubt, would have been rendered unfit for use before the summer was over. Perhaps, Mr. Editor, in giving you and your readers the information detailed in this paper, I have been "carrying coals to Newcastle;" if so, light your spirit lamp with it, and I shall be satisfied, as my only object is to do good, and not to see myself in print.

With my best wishes for your restoration to health, and success in your pursuits, I remain your friend, Z.—[Southern Agriculturist.]

CULTURE OF POTATOES AND INDIAN CORN.—On passing a well cultivated farm two days ago, I observed in a potato field that the earth

had been drawn up into hills nearly one foot high and somewhat conical, closely round the stems; and I doubted if that labor had been well directed. It is now twenty-five years since I had a patch of potatoes which we had commenced hoeing in dry weather. A neighbor mildly remonstrated with me against our proceedings, and said that potatoes hoed in dry weather generally yield a poor crop. I had not duly considered the subject, but I took his advice, waiting until we had a rain before we hoed the remainder, and the difference in the produce of the two parcels was as great as he had predicted,—certainly more than three to one in favor of hoeing when the ground was well moistened. It was not so wet however as to be muddy. The cause of this result was that the leaves of the potato shed the rain, and turn it from the hill, perhaps more than any other vegetable which we cultivate; and if the hills be made high and sharp, and once become dry, a moderate shower of rain will rarely penetrate to the roots.

The potato, to yield abundantly, requires a plentiful supply of moisture, although it is very impatient of stagnant water; and some may wonder why its leaves should turn off the very thing for which its roots are languishing. It should be remembered, however, that the potato grows indigenously in a very different and distant country from ours. In a state of nature, no hills are piled up round its stems; and in our culture, we ought to consider the constitution of the plant, and remedy as far as practicable the defects of our climate. If it is cultivated in HILLS, these ought to be neither high nor sharp, but depressed on the summit; or rather shaped like a basin, to catch the rain as it falls, and turn it towards the roots. If it is cultivated in rows with the plough, the same object should be borne in mind. I have seen a plough with an additional piece of wood on the mold-board, so as to raise the earth high round the stems; and when the work was finished, the ridges were sharp like the roof of a house, and turned off the water nearly as well. The appearance of a field soon after the operation was fine; but the crop, as we might expect, was very light.

Indian corn, on the contrary, will bear hilling much better; though I think this business is often overdone. It is very evident that all the loose earth should not be scraped from the furrows between the rows, as I have sometimes seen it; for in heavy loams, the hard ground, if left uncovered, is sure to crack in dry weather, and let out the moisture from below. I shall recur however to my first remark on this plant. The leaves of Indian corn are so constructed as to turn most of the rain that falls on them down to the roots. After a short but dashing shower, I have soon after found the other parts of the field comparatively dry, while it seemed as if a basin of water had been poured into each hill.—[Gen. Farmer.]

If the words 'hilled up' were substituted for 'hoed' in the sentence in Italics, we think it would be more correct.—[Ed. N. Y. F.]

NEW BREAD.—A Parisian chemist has established a bakehouse for bread made from potatoes, which is animalized by the addition of the gelatine made from bones. In this way, a food which is said to be equally pleasant and more nutritious than wheaten bread, is obtained at half the expense of the latter. A large quantity of biscuits for the use of the African expedition has been made upon this plan. In a time of scarcity of corn the discovery will prove a great blessing.

TO KEEP PLUMS AND PEACHES FRESH THROUGH THE YEAR.—Beat well up together equal quantities of honey and spring water; pour the mixture into an earthen vessel; put in the fruits all freshly gathered, and cover them up quite close. When any of the fruit is taken out, wash it in cold water, and it will be fit for immediate use.

NEW-YORK AMERICAN.

AUGUST 9—18, 1854.

LITERARY NOTICES.

COMPLETE WORKS OF SIR WALTER SCOTT.—Parts 33 and 34.—Poetry. Conner & Cooke.—The early reputation which Scott won by his Minstrelsy of the Scottish Border, of which these two numbers consist, was so completely swallowed up in the renown of the author of Waverley, or rather first in that of the Lay of the Last Minstrel, that these earlier efforts of his genius and his industry seem almost to have been forgotten. The excellent edition of his works, by Messrs. Conner & Cooke, place his admirable collection of ballads afresh before us, and we are induced to make a few extracts:

Barthram's Dirge.—The following beautiful fragment was taken down by Mr. Surtees, from the recitation of Ann Douglass, an old woman who weeded in his garden. It is imperfect, and the words within brackets were inserted by my correspondent, to supply such stanzas as the chanter's memory left defective. The hero of the ditty, if the reciter be correct, was shot to death by nine brothers, whose sisters he had seduced, but was afterwards buried, at her request, near their usual place of meeting; which may account for his being laid, not in holy ground, but beside the burn. The name of Barthram, or Bertram, would argue a Northumbrian origin; and there is, or was, a Headless Cross, among many so named, near Elsdon in Northumberland. But the mention of the Nine-Stane Burn, and Nine-Stane Rig, seems to refer to those places in the vicinity of Hermitage Castle, which is countenanced by the mentioning our Lady's Chapel. Perhaps the hero may have been an Englishman, and the lady a native of Scotland; which renders the catastrophe even more probable. The style of the ballad is rather Scottish than Northumbrian. They certainly did bury in former days near the Nine-Stane Burn; for the Editor remembers finding a small monumental cross, with initials, lying among the heather. It was so small, that, with the assistance of another gentleman, he easily placed it upright.

BARTHRAM'S DIRGE.

They shot him dead at the Nine-Stane Rig,
Beside the Headless Cross,
And they left him lying in his blood,
Upon the moor and moss.

They made a bier of the broken bough,
The sauch and the aspen gray,
And they bore him to the Lady Chapel,
And waked him there all day.

A lady came to that lonely bower,
And threw her robes aside,
She tore her ling (long) yellow hair,
And knelt at Barthram's side.

She bathed him in the Lady-Well,
His wounds so deep and sair,
And she plaited a garland for his breast,
And a garland for his hair.

They rowed him in a lily sheet,
And bare him to his earth,
[And the Gray Friars sang the dead man's mass,
As they pass'd the Chapel Garth.]

They buried him at the mirk midnight,
[When the dew fell cold and still,
When the aspen gray forgot to play,
And the mist clung to the hill.]

They dug his grave but a bare foot deep,
By the edge of the Ninestane Burn,
And they covered him [o'er with the heather flower,
The moss and the [Lady] fern.

A Gray Friar staid upon the grave,
And sang till the morning tide,
And a friar shall sing for Barthram's soul,
While the headless Cross shall bide.

The manner in which the following ballad was spoken of in the Edinburgh Review, with the beautiful stanzas of Wordsworth on the same subject, is familiar to our readers; but it will bear repetition:

Fair Helen of Kircconnell.—The following very popular ballad has been handed down by tradition in its present imperfect state. The affecting incident, on which it is founded, is well known. A lady of the name of Helen Irving, or Bell, (for this is disputed by the two clans,) daughter of the Laird of Kircconnell, in Dumfriesshire, and celebrated for her beauty, was beloved by two gentlemen in the neighborhood. The name of the favored suitor was Adam Fleming of Kirkpatrick; that of the other has escaped tradition: though it has been alleged, that he was a Bell, of Blacket House. The addresses of the latter were, however, favored by the friends of the lady, and the lovers were therefore obliged to meet in secret, and by night in the churchyard of Kircconnell, a romantic spot almost surrounded by the river Kirtle. During one of these private interviews, the jealous and dis-

pised lover suddenly appeared on the opposite bank of the stream and, levelled his carbine at the breast of his rival. Helen threw herself before her lover, received in her bosom the bullet, and died in his arms. A desperate and mortal combat ensued between Fleming and the murderer, in which the latter was cut to pieces. Other accounts say, that Fleming pursued his enemy to Spain, and slew him in the streets of Madrid.

The ballad, as now published, consists of two parts. The first seems to be an address, either by Fleming or his rival, to the lady; if, indeed it constituted any portion of the original poem. For the Editor cannot help suspecting, that these verses have been the production of a different and inferior bard, and only adapted to the original measure and tune. But this suspicion being unwarranted by any copy he has been able to procure, he does not venture to do more than intimate his own opinion. The second part, by far the most beautiful, and which is unquestionably original, forms the lament of Fleming over the grave of fair Helen.

The ballad is here given, without alteration or improvement, from the most accurate copy which could be recovered. The fate of Helen has not however, remained unsung by modern bards. A lament of great poetical merit, by the learned historian, Mr. Pinkerton, with several other poems on this subject, have been printed in various forms.

The grave of the lovers is yet shown in the churchyard of Kircconnell, near Springkell. Upon the tombstone can still be read—*Hic jacet Adamus Fleming;* a cross and sword are sculptured on the stone. The former is called by the country people, the gun with which Helen was murdered; and the latter, the avenging sword of her lover. *Sit illis terra levis!* A heap of stones is raised on the spot where the murder was committed; a token of abhorrence common to most nations.

FAIR HELEN.—PART FIRST.

O! sweetest sweet, and fairest fair,
Of birth and worth beyond compare,
Thou art the cause of my care,
Since first I loved thee.

Yet God hath given to me a mind,
The which to thee shall prove as kind
As any one that thou shalt find,
Of high or low degree.

The shallowest water makes maist din,
The deepest pool, the deepest lin;
The richest man least truth within,
Though he preferred be.

Yet, nevertheless, I am content,
And never a whit my love repent,
But think the time was a' weel spent,
Though I dudained be.

O! Helen sweet, and maist complete,
My captive spirit's at thy feet:
Thinks thou still fit thus for to treat
Thy captive cruelly?

O! Helen brave! but this I crave,
Of thy poor slave some pity have,
And do him save that's near his grave,
And dies for love of thee.

PART SECOND.

I wish I were where Helen lies,
Night and day on me she cries;
O that I were where Helen lies,
On fair Kircconnell Lee!

Curst be the heart that thought the thought,
And earn'd the hand that fired the shot.
When in my arms burd' Helen dropt,
And died to succour me!

O think na ye my heart was sair,
When my love dropt down and spak nae mair,
T'ere did she swoon w' meikle care,
On fair Kircconnell Lee.

As I went down the water side,
None but my foe to be my guide,
None but my foe to be my guide,
On fair Kircconnell Lee!

I lighted down my sword to draw,
I hacked him in pieces am,
I hacked him in pieces am,
For her sake that died for me.

O Helen fair, beyond compare!
I'll make a garland of thy hair,
Shall bind my heart for ever mair,
Until the day I die.

Oh that I were where Helen lies!
Night and day on me she cries;
Out of my bed she bids me rise,
Says, "Haste and come to me!"

O Helen fair! O Helen chaste!
If I were with thee, I were blest,
Where thou lies low, and takes thy rest,
On fair Kircconnell Lee.

I wish my grave were growing green,
A winding-sheet drawn o'er my cen,
And I in Helen's arms lying,
On fair Kircconnell Lee.

I wish I were where Helen lies!
Night and day on me she cries;
And I am weary of the skies,
For her sake that died for me.

THE AMERICAN MONTHLY MAGAZINE FOR AUGUST sustains the reputation which this periodical has long

Fair Helen—Maid Helen.

been gradually but deservedly establishing for itself. It has now, without the least aid from puffing, established itself in the favor and confidence of the reading public, winning its way solely by its own merits. The present number is enriched by one of those articles (we believe we may say from the pen of the Editor) to which we have more than once called attention, entitled, "Passages from the Life of Mary Queen of Scots." The portion we have selected for extracting, commences with a beautiful tribute to Maternal Love; in which the writer paints with considerable feeling the purest, the truest, the holiest emotions that ever swell a human bosom: and concludes with an epigrammatic censure of Queen Elizabeth, which will be responded to by every one who justly appreciates the character of that singularly gifted but vain and hollow-hearted woman. It is as follows:

There is, perhaps, no aspect of the mind—many-colored and various as are the points of view in which it may be considered—more singular than that, wherein it seems to collect itself, as it were, and to concentrate, into a solitary moment of time, all the thousand emotions, whether of bliss or agony, which it may have endured in disconnected succession through a long term of years. That moments of this description are neither of rare occurrence, nor confined to individuals of any peculiar character, must be evident to all who have observed, even with common interest, that most wonderful of created essences, the mind of man. To those, however, who look somewhat beyond the surface of things, it will become manifest,—without becoming, on that account, one iota the less marvellous,—that the mind is more apt to return, and to live over again the events of former days, abstracting itself wholly, and becoming totally forgetful of the present in its contemplation of the past, at periods of acute feeling, or of engrossing excitement; periods in which it would be naturally expected that apprehension, anxiety, or sorrow, would seize all the faculties of thought with a grasp so paralyzing, as to rivet them immovably to the consideration of their own immediate destiny.

It was in a state of mind not wholly dissimilar to that which we have endeavored to shadow forth, that Mary, in the solitude of her last earthly night, diverting her attention entirely from the terrible shock she was about to undergo on the morrow, thought only of her native land, still dear, though still ungrateful, a prey to the fierce contentions of her own factious offspring; of her son, torn at the earliest dawn of his affections from the arms of a mother, nurtured among those who would teach him to eradicate every warmer recollection; to pluck forth, as if it were an offending eye, every lingering tenderness for that being, who, amidst all her sins and all her sorrows, had never ceased to love him with a perfect and entire love. There is, in truth, a something more evidently divine, partaking more nearly of that, which we believe to be the very essence of divinity, in a mother's love, than in any other pang or passion; for every passion, how sweet soever it may be, is yet a pang,—of the human soul. All other love is liable to diminution, to change, to extinction; all other love may be alienated by the neglect, chilled by the coldness, frozen to the core by the worthlessness, of the object once beloved.

All other affections are influenced by a thousand trivial circumstances of time and place; absence may weaken their influence, time obscure their vividness, and above all, custom may rob them of their value; over all other love, the estimation of the world exercises an almost boundless sway; we honor, in our heart of hearts, those whom the world has dignified with its approval, and too often, if that approval be unmeritedly withdrawn, we too insensibly desert from that admiration, which must be a component part in every warmer sentiment. But on the love of a mother,—commencing as it does, before the object of her solicitude possesses form or being; springing from agony and sorrow; ripening in anxiety and care; and reaping too often the bitter harvest of ingratitude,—all external influences, all incidental causes, are powerless and vain. Time—but excites her admiration, but increases her solicitude, but redoubles her affections. Absence—but causes her to dwell with a more engrossing memory on him, from whom her heart is never absent. Custom—but hal-lows the sentiments, to which nature has given birth. Neglect and coldness—but cause her to strain every nerve to merit more and more the poor return of filial love, the solitary aim of her existence; so heartless, so denied her. Nay, worthlessness itself—but binds

her more closely to him, whom the false and fickle world has cast aside, to find a refuge in the only bosom, which will not perceive his errors, or credit his utter destitution.

Thus, thus it was with Mary!—She knew that the child of her affections regarded those affections as vile and worthless weeds!—She knew that he was selfish, vain, and heartless!—She knew that, when she had toiled through many a summer's day and many a wintry night in framing for her beloved boy a garment, embroidered with the best of her poor skill, decked with every gem that yet remained to her of all her former pomp,—that garment, the labor and at the same time a solace to her imprisoned weariness,—that garment, which a son, possessed even of one spark of human feeling, would have cherished above the value of man's loyalty, or woman's love,—would have prized beyond throne or principality,—would have worshipped, as second only to the God of his adoration,—that garment, on a miserable pretext of court etiquette, was returned to the heart broken captive, as a mere gift of a ceremony, a thing under any circumstances valueless, but now impertinent and calling for contempt instead of gratitude!—She knew that a single embassy—a single word from that child, whom she still adored,—if conveyed to her relentless persecutor in the strong language of sincerity and zeal, if borne not by a fawning courtier, but by one of those high spirits which Scotland has found ever ready at her need, if enforced by instant threats of war, would have broken her fetters in a moment, and conveyed her from the dungeons of Fotheringay to the courts of Holyrood!—All this she knew, yet her heart would not know it. When all Europe rang with curses on the unnatural vacillation of that son; when every Scottish heart, whatever might be its policy or its party, despised this abject cringing; when Elizabeth herself, while she flattered his vanity, and affected to honor and esteem his virtue, scoffed in her royal privacy at the tool she designed to use in public; Mary alone,—Mary the only sufferer, the only victim of his baseness,—still clung to the imagination of his probity, still adored the child, who was driving her out, as the scape-goat of the Jews, to expiate the sins of himself and his people, by her own destruction. But it was not on James alone that her wayward memory was fixed. At a time when any soul less dauntless, any spirit less exalted, would have shrunk beneath its load of sorrows, Mary had a fond regret, a tear of sorrow, a sigh of sincere gratitude, for every gallant life that had devoted itself to ward from her that fate, which their united loyalty had failed only, to defer, not to avert. Chastelar passed before her with his tones of sweetest melancholy, and that unutterable love, which made him invoke blessings upon her, who doomed him to the block—and Darnley, as he had seemed in the few short hours, when he had been, when he had deserved to be, the idol of her heart—and Bothwell, the bold, the eloquent, the glorious, but the guilty Bothwell—her ruin and her betrayer—Douglass, the noble, hapless Douglass, he who had riven the bolts of Lochleven, and sent her forth to a short freedom and a worse captivity—Huntley, and Hamilton and Seyton, and Kirkcaldy the most formidable of her foes, till he became the firmest of her friends, all passed in sad review before the eyes of her entranced imagination.

Thus it was that the last Queen of Scotland passed the latest night of her existence. With no consciousness of time, with no care for the present, no apprehension of the future, she had paced the narrow floor of her apartment during the still hours of midnight. Unperceived by her had the stars paled, and then banished from the brightening firmament; unseen had the faint dappling of the east grown into the cold clear light of a wintry morning; unheard had the castle clock sent forth its giant echoes hour after hour, to be heard by every watcher over leagues of field and forest. Another sound rose heavily, and at once she was collected—time, place, and circumstances, flashed fully on her mind; she was prepared to meet them. It was the roar of the morning culverin, and scarcely had its deafening voice swept over, before a single bell, hoarse, slow, and solemn, pealed minute after minute, the signal of her approaching dissolution.

Calmly, as if she were about to prepare for some gay festival, she turned to the apartment where her ladies, overdone by wo and watching, yet slumbered, forgetful of the dread occasion.

"Arise"—she said in sweet low notes, "arise, my girls, and do your last of earthly duties to the mistress ye have served so well. Nay! start not up so wildly; nor blush, that ye have slept while we were watching. Dear girls, the time hath come—

the time for which my soul has so long thirsted.—Array me then, array me as to a banquet, a glorious banquet of immortality! See"—she continued scattering her long locks over her shoulders—"see—they were bright of yore, as the last sunbeam of a summer day, yet I am prouder of them now, with their long streaks of untimely snow—for now they tell a tale of sorrows borne as it becomes a queen to bear them! Braid them with all your skill, and place yon pearls around my velvet head-gear. We will go forth to die, clad as a bride, and now methinks the Queen of France and Scotland owns but a single robe of rich device—bring forth our royal train and brodered farthingale—it suits us not to fall with our limbs clad in the garb of mourning, when heaven knows the heart is clothed in gladness."—Tearless, while all around were drowned in lamentations, she strove to cheer them to the performance of this their last sad office, not with the commonplace assurances, the miserable resources of earthly consolation, much less with aught of heartless levity, or of that unfeeling parade which has so oft adorned the scaffold with a jest, and concealed the anxiety of a heart ill at ease beneath the semblance of ill-timed merriment; but by suffering them to read her inmost soul, by showing them the true position of her existence, by pointing out to them the actual hardships of body, and the still deeper humiliations of the soul, from which the door of her escape was even now unclosing; and if she was not wholly successful, she yet prevailed upon them to restrain the bitterness of their grief, and, if sorrow they must, at least to sorrow in secrecy and silence. Scarcely had she completed her attire, and tasted of the consecrated wafer, long ago procured from the holy Pius, and treasured for this extremity, when the tread of many feet, and a slight clash of weapons in the ante-chamber, announced that the hour had arrived.

Once and again, ere she gave the signal to unclothe the door, she embraced each one of her attendants—"Dear, faithful friends, adieu, adieu"—she said—"forever: and now remember!—remember the last words of Mary. Weep not for me, and, if ye love me, shake not my steadfastness, which, thanks to him who is the Father and the Friend of the afflicted, the fear of death cannot shake, by useless lamentation or abject terror. We would die as a martyr, cheerfully—as a queen, nobly! Fare ye well—and remember!"—With an air of royal dignity she seated herself, and with her maidens standing around her throne, she bore the mien of a high potentate, awaiting the arrival of some proud legation, rather than of a captive expecting her summons to the block—"And now"—she said, as she arranged her draperies with dignified serenity—"admit their envoy!"

The doors were instantly thrown open as she spoke—the sheriff uttered his customary summons, and without a shudder she arose. "Lead on,"—she said—"we follow thee more joyously than thou, methinks, can marshal us! Sir Amias Paulet, lend us thine arm; it fits us not, that we proceed even to the death, without some show of courtesy. Maidens—bear up our train—end, now sir, we are ready."

But a heavier trial than the axe awaited the unhappy sovereign; for as she set her foot on the first step of the stairs, Melvil, her faithful steward, flung himself at her feet with almost girlish wailings.—Friendly and familiarly she raised him from the ground. "Nay, sorrow not for me," she said, "true friend, subject for sorrow there is none, unless thou grieve that Mary is set free, that for the captive's weeds she shall put on a robe of immortality, and for a crown of earthly misery a circlet of beatitude!"

"Alas! alas!—God grant that I may die, rather than look upon the damned deed."

"Nay, live good Melvil, for my sake, live! Commend me to my son, and say to him, Mary's last thoughts on earth were due to France and Scotland—her last but these to him! Say that she died, unshaken in her faith to God, unwavering in her courage, and confident in her reward. Farewell, true servant—take from the lips of Mary the last kiss that mortal e'er may taste, and fare the well forever!"

At this moment the Earl of Kent stepped forth, and roughly bade her dismiss her women also—"for the present matter lacked other ministers than such as these." For a moment she condescended to plead that they might be suffered to attend her to the last, but when she was again refused, her ancient spirit flashed out in every tone, as she cried trumpet-like and clear, "Proud lord, beware!—I too am cousin to your queen—I too am sprung from your proud blood of Tudor—I too am an anointed queen. I say thou shalt obey, and these shall follow their mistress

to the death—or by foul violence shalt thou force me thither—Beware! Beware, I say, how thou dare do me this dishonor."

Her words prevailed—without a shudder she descended—entered the fatal hall,—looked with an air of smiling condescension, an air almost of pity, on the spectators crowded almost to suffocation, and mounting the scaffold stood in proud and abstracted unconcern, while, in the measured sounds of a proclamation, the warrant for her death was read beside her elbow. The bishop of Peterborough then drew near, and in a loud voice and inflated style, harrassed her ears with an oration, which, whatever might have been its merits, was at that moment but a barbarous and needless outrage. "Trouble not yourself," she broke in at length, disgusted with his intemperate eloquence. "trouble not yourself any more about this matter; for I was born in this religion, I have lived in this religion, and in this religion I am resolved to die." Turning resolutely aside, as if resolved to hear no further, she knelt apart, fervently prayed, and kissed again and again the sculptured emblem which she bore, of Him who died to save. As she arose from her orisons, the Earl of Kent, with heartless cruelty, her constant and relentless persecutor, burst into low revilings against "that popish trumpery" which she adored. "Suffer me now," she said, gazing on him with an expression of beautiful resignation that might have disarmed the malice of a fiend, "suffer me now to depart in peace. I have come here; not to dispute on points of doctrine, but to die." Without another word she began to disrobe herself, but once, as her maidens hung weeping about her person, she laid her finger on her lips, and repeated emphatically the word, "remember!" And once again, as the executioner would have lent his aid to remove her upper garments; "good friend," she said, with a smile of ineffable sweetness, "we will dispense with thine assistance. The Queen of Scotland is not wont to be disrobed before so many eyes, nor yet by valets, such as thou!" All was now ready—the lovely neck was bared; the wretch who was to perform the deed of blood, grasping the fatal axe; and the fierce Earl of Kent beating the ground with his heel, in savage eagerness! Without a sigh she knelt, without a sign of trepidation, a quicker heave of her bosom, or a brighter flush of her brow, she laid down her innocent head; and, without a struggle or convulsion of her limbs, as the axe flashed, and the life-blood spouted into the very countenance of her slayer, did her spirit pass away. A general burst of lamentation broke the silence, but, amidst that burst, the heavy stride of Kent was heard, as he sprang upon the scaffold, and raised the ghastly visage, the eyes yet twinkling, and the lips quivering in the death struggle! A single voice, the voice of the zealous bishop, cried aloud, "Thus perish all the foes of Queen Elizabeth," but e'er the response had passed the teeth of Kent, a wilder cry rang through the hall. The savage yell of a small greyhound, the fond companion of the murdered queen's captivity! Bursting from the attendants who vainly strove to hold her back, she dashed, with a quick, wild cry, full at the throat of the astonished earl; but e'er he could move a limb, the peril, if peril there were, was past. The spirit had been too mighty for the little frame. The energies of the faithful brute were exhausted, its heart broken, in that death spring. It struck the headless body of its mistress as it fell, and, in an agony of tenderness, perished while licking the hand that had fed and cherished it so long. Wonderful! that when all men had deserted her, a brute should be found constant in its pure allegiance! and yet more wonderful, that the same blow should have completed the destiny of two rival sovereigns! And yet, so it was! The same axe gave the death-blow to the body of the Scottish and to the fame of the English queen, THE SAME STROKE COMPLETED THE SORROWS OF MARY AND THE INFAMY OF ELIZABETH.

THE FREE CITIES OF FLANDERS is the title of an article in the last number of the North American Review, which affords one of the most concise accounts that we remember to have met with, of the deeds of those bold Burgheers, who so long kept the flag of freedom flying when the pennons of all Europe's chivalry were rusting against it. The restrictive limits of such a paper, however, has prevented its author from expatiating as he might upon the causes that kept alive the spirit of liberty in these commercial towns; when its principles seemed wholly misunderstood throughout the rest of Christendom. The gradual growth of the *Tiers Etat* is indeed the

subject of tedious dissertation with so many historians, that a periodical writer may readily be forgiven for passing it over with a few touches; but it has sometimes occurred to us, when reflecting upon the manner in which the present degrees of liberty enjoyed in various parts of the world have been acquired from those who at one time enjoyed the complete monopoly of power, that some useful lessons might be deduced for our people at home, from the events of former ages. And first, we may remark that the extension of commerce, and the rise and influence of the mercantile interest, have in all States anticipated, or been coeval with, the growth of their liberties; while those liberties again have been most stoutly maintained, at least, in the free cities of Europe, by the tradesmen and mechanics. It was these last especially, who, under their respective leaders, succeeded so long in maintaining the proud city of Ghent—the Milan of Northern Europe, as Guicciardini terms it—against the various feudal powers that successively assailed her liberties, until the paricidal arm of Charles V. crushed them at a blow, and robbed the place of his birth of a prosperity which she has never since recovered.

One of the heaviest charges to be brought against writers of fiction, in almost every age, is that blind leaning to power, which, from the days of Virgil and Horace, to those of Scott and Southey, have placed them upon the tory side of politics, and, eliciting praises direct or implied, for those who filled the chair of patronage, left only sneers and contumely for "the base mechanic," who battled to the last for the cause of liberty. The halo that has been thrown by their magic pens around the vaunted deeds of Chivalry, has stolen its proper light from a thousand acts of heroism, that might have illumined names now lost for ever to the world; that might have left lessons of self sacrificing patriotism for mankind that would have kept truth much longer upon earth. In every country, where liberty has been long maintained, it is in the middle classes that its principles have most resided, and, however the poet and novelist may sneer at "burly burghers" and "greasy citizens," it is by the inhabitants of cities, that its holy fires have been watched with the most religious jealousy, and shielded with the most invincible spirit.

RAILROAD AND CANAL MAP: D. K. Minor, 35 Wall street.—This is a convenient pocket map of the United States, on a scale of about 40 miles to the inch, upon which is laid down all the principal lakes, rivers, cities, towns and villages—together with the CANALS and RAILROADS made, making, chartered, and many of those in contemplation, not at present chartered, with a concise description of, or reference to, each—showing not only their present location, but also the probable connection hereafter of those which are now viewed only as distinct works. It refers particularly to the subject of a STEAMBOAT CANAL from the Hudson to Lake Ontario—from Ontario to Erie—and from Erie through the Miami and Wabash rivers, or from Chicago to the Illinois and Mississippi rivers, by which enterprise would be opened an inland communication with New Orleans of more than 3,500 miles.

TWO DAYS LATER FROM LONDON.—London dates to July 2d, have been received at Boston, via Halifax. Mr. Wyer, bearer of the Treaty of Commerce agreed upon between the United States and Spain, left Paris June 30, for Madrid.

All was tranquil at Madrid 21st June. The Queen reviewed the army of Rodil, from Portugal, and was enthusiastically received by the troops. A fresh conspiracy has been discovered in Bulgaria.

Forty men and one woman were lost from the swamping of a boat in the river Feale.

Effects of the late Riots in France.—The Court of Peers have issued upwards of four hundred warrants of arrest, of search, and rogatory commissions. The number arrested in Paris since April, exceeds

960; at Lyons the number is upwards of 1200. All the prisons are full—one of which contains 460.

CHOLERA IN DUBLIN.—The Cholera has made its appearance again in Dublin and its vicinity, with scarcely any abatement of the virulence which marked its approach. In the neighborhood of Kingston and vicinity, (says a letter writer,) numerous fatal cases have occurred; and although no public mention has been made of Cholera in this city, I have heard from good authority that 40 deaths occurred in one parish on the north side of the river last week.

LONDON, JULY 2.—Letters from the Mediterranean state the probability of a rupture between the Porte and the Pacha in Egypt. The Sultan persists in demanding two years arrears of tribute from Mehemet Ali, when he is not disposed to pay, nor has he yet evacuated the districts of Oursa and Raica, as required by the Porte. Should the war be renewed, France and England will have a difficult part to act, but it is believed, that on the event of another Russian army entering Constantinople, the combined fleet, now thirteen sail of the line, and numerous large frigates, will try the passage of the Dardanelles, and thus put to issue the late secret treaty between the Porte and Russia.

LATER FROM ENGLAND.—By the President, from London, papers of that city of the 4th ult. are received. We are indebted to the Commercial Advertiser for the use of them. We do not notice any thing of much interest.

The French Chamber of Deputies was convened for the 31st July. It was supposed the King, after opening the session in person, would make a tour through the south of France.

According to the *Temps*, the Duke Decazes, with a vice-regal salary, was appointed Governor of Algiers. The ministerial papers make no allusion to such an appointment.

The Editor of the Morning Post—committed by the House of Lords for a breach of privilege in assailing the Lord Chancellor—had been reprimanded and discharged, after an expression on his part of contrition for the offence.

THE IRISH COERCION BILL.—After several fruitless attempts to negotiate with O'Connell and his friends, for a renewal of the Irish Coercion Bill, with essential modifications, on the 4th of July, Earl Grey brought forward the law about to expire, omitting only the Court Marshal clause. A sharp incidental skirmish took place in the Commons, upon this subject, on the 3d, between Mr. Littleton, the new Irish Secretary, and Mr. O'Connell.

The London Morning Herald, of July 2d, contains the following article from its correspondent at Madrid.

We confess we see with pleasure the interest thus manifested by our Government, in the welfare and prosperity of the other peoples of this Continent. Placed by our position, resources, and early acquired liberties, at the head of American nations, it is fit, wheresoever it can, as in this instance, be done with perfect propriety, that the influence of these States should be exerted for the common benefit of our Continent.

Prospective Recognition of the South American Colonies.

MADRID, June 18.—Being of opinion that the recognition of the South American States and the melioration of the Spanish commercial policy were questions of paramount importance, and much more valuable to Great Britain than those other points to which our attention has been so exclusively directed, I have watched since I came here the steps of the present ministry on the subject, and I have now succeeded in obtaining two remarkable documents, translations of which I immediately submit, through the medium of a useful agent, who occasionally supplies me with papers from the public offices. The first is a copy of a note, addressed on the 12th February, 1834, by the Minister of the United States to the Foreign Office, and the second is the reply of M. Martinez de la Rosa, dated the 12th of this month. From the one you will learn how wisely the American government has been pursuing an object so essential to its commerce, and how favorably it must appear before the South American States as the power to whose exertions they are indebted for the first symptoms of reviving affection on the part of the mother country; and from the other you will infer that the willingness to treat with the South American commissioners is only a

prelude to the grand act of a recognition, which must take place as soon as the terms are arranged. The American Minister's note is as follows:

"LEGATION OF THE UNITED STATES OF AMERICA. Madrid, Feb. 12, 1834."

"In pursuance of instructions from the President of the United States, I had the honor, on the 6th of May, 1831, to address a note to his Excellency Don Manuel Gonzales Salmon, then his Majesty's Principal Secretary of State, stating that the anxiety which the government of the United States had long felt, and which theretofore had been fully made known to his Majesty's government, that an amicable and satisfactory settlement between Spain and her former colonies, the new American States, should take place, had arisen as well from a regard to the principles of humanity and the interests of the party concerned, especially that of Spain, as from the expectations of benefit to the United States.

"I added that the government of the United States, without intending or wishing to depart from its settled policy of not interfering with the affairs of other nations, except by friendly advice in cases in which it might be thought suitable, felt itself authorized by the friendly relations existing between the United States and Spain, and by the circumstances of the case, to make another appeal to his Majesty on a question so great and so general an interest, and that in doing so it indulged a strong hope that his Majesty would not any longer refuse to open a negotiation with the new States, but that, on a full and deliberate review of the matter, he would be convinced that, independently of the satisfaction which such an event would afford to most if not to all the nations with which Spain had friendly intercourse, a recognition by his Majesty of the independence of those States, upon just and proper terms, would contribute both to the honor and interest of Spain. And I concluded by suggesting some considerations in relation to the remaining possessions of Spain in America, which I hoped would not have been disregarded.

"To the note in question Mr. Salmon favored me with an answer, under date of the 11th June of the same year, by which I was informed that the King received my communication as a proof of the strong interest felt by my government in favor of his Majesty, and that as the question was fully present to his Royal mind, he would take it into consideration when the case might be favorable, in such a manner as might be most conformable to the interest of his crown, and that then the friendly communication made by me would not be forgotten.

"The President of the United States, having deemed the accession of Donna Isabel the Second to the throne of Spain, under the regency of her august mother, a favorable occasion for the renewal of his efforts, has directed me to lose no time in addressing her Majesty's government on the subject.

"Without entering anew upon the field of argument which presents itself, it is conceived by the President that all the considerations which have heretofore existed, and been pressed upon the government of Spain, in favor of a conclusion of this matter upon the basis of the recognition by Spain of the independence of the States above mentioned, not only continue to exist, but have been greatly strengthened by time and circumstances, and he cannot but persuade himself that the case will be received in its true light by the liberal and enlightened government of Donna Isabel the Second; and that one of the first great acts from which it may be destined to derive lasting distinction and applause will be a prompt and just arrangement of the American question.

"It only remains for me to add that the government of the United States is ready and desirous, as it has ever been, to do all in its power for the mutual conciliation of the parties concerned, and to facilitate the final conclusion of their disputes upon terms alike honorable and advantageous to all sides.

I have the honor, &c.

(Signed)

J. P. VAN NESS.

The following is a translation of the reply of M. Martinez de la Rosa.

"At the Palace, June 12."

"The multiplicity of business which the Department of State has been charged with since her Majesty the Queen Regent was pleased to intrust me with that office, has prevented my giving an earlier reply to the several applications which your Excellency, in pursuance of instructions from your government, has made to me respecting the importance and expediency, to use your Excellency's own words, 'of a prompt and just arrangement of the American question.'

"Her Majesty in her wisdom cannot but be aware of the advantages of being relieved from an uncertain

position, and of adopting a definitive decision in regard to the vast territories alluded to; and for my part, if my humble opinion be considered of any weight in determining the measures of her Majesty, I can assure your Excellency that as soon as the late King Don Ferdinand did me the honor to appoint me to this department, ten years ago, I called the attention of the government to this interesting question, from the persuasion I was under of the injury and loss which would accrue from any delay in the settlement of it, and because it appeared to me quite practicable, at least was then my opinion, as it is now, to consolidate the interests of our brethren in South America with the interests of the Peninsula, by the adoption of a basis reciprocally great and advantageous.

"For the accomplishment of this object his Majesty's government despatched at that period several special commissioners, who were furnished with the necessary instructions, and were directed to announce a cessation of hostilities, and to propose, as a preliminary step towards the removal of the political difficulties, the re-establishment of the commercial relations of the two countries. The great events which soon after occurred, and which are two well known to require being recorded, prevented the fulfilment of the wish, as then entertained by the Spanish government, and this great and interesting question has remained in a state of suspense from that time to the present.

"The decision of it, however, is desired by the Queen Regent, who in the government of this monarchy is guided by principles of a liberal and enlightened policy, and her majesty has accordingly authorized me to communicate to the diplomatic agents of Spain in foreign courts, especially those in Paris and London, the necessary instructions, to the end that if any commissioners present themselves with powers and instructions of a nature to offer to Spain a just and honorable arrangement, they may afford such commissioners all the facilities and guarantees they may desire, with the assurance that they will find her Majesty animated by the most favorable dispositions.

"Her majesty has, at the same time, authorized me to make to your Excellency this frank declaration, in order that you may communicate the same to your government, in return for the wishes expressed by it of an early conclusion of this interesting question; and as her Majesty feels confident, after consulting her personal feelings, without disregarding the suggestions of a sound policy, that nothing would be more easy than to effect a reconciliation of parties who, in all respects, may consider themselves as children of the same family, when once they shall have consented to an interview. Her Majesty entertains the hope that as soon as negotiations may be entered upon in a spirit of sincerity and good faith, the object in question, which, as is expressed with much precision in your Excellency's note, is 'a mutual reconciliation and final conclusion of the differences of the parties, advantageous and honorable to all,' will be completely realized.

"Renewing to your Excellency the assurance, &c.
(Signed) "MARTINEZ DE LA ROSA."

These notes must produce a general satisfaction among those who are interested in the South American States; and I am entitled to assure them from the verbal communications which have taken place in the Foreign Office, as well as from the written document, that no impediment now remains as to the recognition; and the Spanish government is neither more nor less seeking but to make the best bargain with her revolted children, and get the best price she can for the admission of their independence. The conditions with regard to the commissioners sent from South America are to be taken as so many words which mean nothing; and it is intended that no difficulties shall be put in the way of coming to a proper understanding.

LATER FROM BELGIUM.—Captain Thatcher, of the ship Warsaw, who arrived yesterday, from Antwerp, whence she sailed on the 5th July, has kindly favored us with a file of Antwerp papers to the 3d of that month. The following are translations:

ANTWERP, 3d JULY.—The news which reaches us from all parts of Flanders encourages us to believe that the crops this year of all kinds of grain will be unusually abundant.

ROME, JUNE 14.—In the consistory yesterday the question of Portugal was seriously debated, and an excommunication will probably be issued against Don Pedro. The measure he has taken of confiscating all ecclesiastical property has excited here general indignation. The ecclesiastical establishments are under the sole authority of the Pope, who will never sanction a similar usurpation.

THE HAGUE, 29th JUNE.—We learn that His Majesty has authorized the Minister of the colonies, for the purpose of favoring the commerce of Surinam, to remit the import duties, tonnage money, and other duties to which vessels, coming from the West Indies, and their cargoes, are subject.

King Leopold has issued a decree granting a premium of 35,000 francs to a merchant who has sent the first vessel of the size of 250 tons, to Alexandria, in Egypt, loaded with articles the produce of national industry, and a premium of 3000 francs to another who has sent the first vessel of 60 tons to Algiers.—[Courier.]

SUMMARY.

Intelligence has been received (says the Globe of yesterday) from the President, since he has entered Tennessee, from which we learn that he is well, and sustains the journey astonishingly, considering the extreme heat, and his suffering a sharp bilious attack, which detained him two or three days at Salem, Virginia. The complaint yielded immediately to remedies.

The Hon. Ezekiel F. Chambers, of the United States Senate, has been appointed Chief Judge of the 2nd Judicial Circuit of Maryland, vice Mr. Earle, resigned. This leaves a vacancy in the United States Senate, which will be filled at the regular session of the Legislature. There is no doubt, we presume, that a gentleman of the same politics with himself (Whig) will be elected in his stead.

Mr. Scorr, editor of the Steubenville (Ohio) Union, was killed last week, near that town, by being thrown from his gig.

BOSTON—Tuesday. The British steamboat Cape Breton, which arrived here a few days since from Halifax, cleared yesterday for New York. She has made some pleasant and expeditious trips about our harbor; and we understand her object has been to show that Sidney coal deserved preference as fuel for steamboats, both for its cheapness and power.

LATE FROM THE SOUTH.—By the steam boat William Gibbons, Capt. Pennoyer, we have received Charleston papers to Saturday evening last, 6th inst. New Orleans dates are to July 31st. The following are extracts:

Extraordinary Despatch.—We are informed that Goods purchased in New York, on last Saturday forenoon reached Augusta, and were sold on Wednesday Evening.

Steam Boat Burnt.—The schr. Rice Plant, Captain Corson, arrived at Charleston, 8th, from Georgetown, having on board, as passengers, Capt. Gardner and crew, ten in number, of the steamboat Walter Raleigh, from Elizabeth City, bound to this port, which vessel was discovered to be on fire in the hold, on Tuesday night last about 8 o'clock. Georgetown Light bearing S. by W, distant 12 miles. In about five minutes after the fire was first observed, the flames had spread so rapidly, that the officers and crew were compelled to abandon the vessel and take to the boat, without saving any thing, with the exception of what they had on; and fortunately, were picked up by the Rice Plant. The Walter Raleigh was intended to run regularly between this port and Columbia.

The Crops.—The Rice crops (says the Georgetown Union) are said to be very promising. We are sorry to say however, that the Corn crops in the neighboring Districts, from information given us, are not so promising as they were five or six weeks ago.

The Crops in the South and West.—The New Orleans Bulletin of the 31st ult. says, "From every section of the Southern country we have the most cheering accounts of the crops; from present appearance the products of Louisiana, Mississippi, Alabama, Tennessee, South Carolina, Georgia and Florida, will far exceed that of any previous year—the accounts from Texas are also flattering. We may remark that the Corn crops of Louisiana and Mississippi, as far as noticed are not good, while in South Alabama they are better than for many years.

Nassau papers, which have been received at Charleston, state that the 1st instant, was the day on which the law emancipating the slaves in the British Colonies, was to take effect. All was perfectly quiet at Nassau and its vicinity, and the Negroes are stated to be apparently indifferent respecting the change.

The U. S. ship John Adams was about to sail from Norfolk on the 6th instant, with the following officers:

D. Conner, Esq. Commander.
Lieutenants—Wm. H. Gardner, C. Ringgold, Wm. F. Lynch, J. S. Sterrett, C. W. Chauncey.
Purser—D. M. F. Thornton.
Surgeon—B. R. Tinslar.
Assistant do—Lewis B. Hunter.
Sailing Master—Wm. Radford.
Passed Midshipmen—J. M. Gillis, Wm. S. Young, Overton Carr, Jas. M. Lockert, James E. Brown.
Midshipmen—Wm. S. Smith, Johnson B. Carter, W. Callender, Simon F. Blount, M. C. Mairin, B. S. Fortor, Wm. C. Brashears, Sam'l Smith, Julius Guthrie.

Captains Clerk—Edward Fitzgerald.
Purser's do—Wm. B. Creecy.
Boatswain—W. Walters.
Gunner—David Taggart.
Sail Maker—Jno. Roser.
Carpenter—Elihu Ellis.
Passenger—Passed Mid. Henry J. Paul.—[Baltimore American.]

James F. Henry, Esq. of New York, is elected Cashier of the Stamford Bank, Con.

SALMON FALLS FACTORY.—We find in the Great Falls Journal the annexed letter, from the Rev. Mr. Caverno, giving the particulars of the recent melancholy fire at Salmon Falls, with more minuteness than any account we have before seen. The editor of the Journal states that the factory was commenced in the spring of 1822, and finished in that and the two subsequent years. It cost, it is said, \$300,000. It had sixty broadcloth looms, and manufactured about 300 yards of cloth per day; giving employment to about 200 persons, and support to 500 inhabitants.

Mr. Moody, Sir—Having just returned from Salmon Falls, I hasten to give you a short sketch of the dreadful fire that occurred there yesterday. The large woollen factory with other buildings, among which was a large boarding house, are entirely consumed. One or two other buildings are nearly destroyed or seriously injured. The fire caught in the second story in the large factory in the picking room, where a lad was employed at the time in picking wool. It caught by friction in the gearing of the picker, and instantly communicated itself to the wool, which being in an unctuous state, and lightly thrown over the floor, communicated itself to every part of the room. In spite of every effort to stop it, it soon found its way to other parts of the building. The alarm was given for the operatives to make their escape, almost at the moment the flame was kindled; but such was its rapidity, that those in the upper story found it hazardous if not entirely impossible to escape by descending the stairs. All was now in confusion. Some leaped from the windows, which it seemed instant death to attempt—some were taken down on ladders; while, awful to relate, two, it is supposed, perished in the flames! Several of those who leaped from the windows were seriously injured—one mortally. This was a girl whose name was Mary Nowell. She expired about 11 o'clock in the evening. Three of those most injured have broken bones or are badly mangled, though there is hope as to their recovery. Their names are Mary Jones, Sarah Nowell, and Miriam Thompson. Those who it is supposed perished in the flames, were Harriet Hasty and Lydia Varney. Such a scene as this, it is presumed, never took place in our section of the country. Never did I see such a gloom as hangs over that pleasant little village.

The amount of property destroyed by this conflagration is said to be \$180,000. \$70,000 or \$75,000 insured. I am yours, &c. A. CAVERNO.
August 8, 1834.

[From the Boston Evening Journal.]

SEA SERPENT.—We understand that yesterday afternoon about 3 o'clock, the crew and passengers of the Portsmouth Packet, Captain Goodrich, had a distinct view of the Sea Serpent, when within about 8 miles of Nahant. There seemed to be no doubt among 30 credible witnesses of his existence. The Monster was about 20 rods off when first seen; and his head, about the size of a barrel, was elevated 3 or 4 feet above the surface of the water.

He seemed frightened at the noise of the boat, and the exclamations of those on board, and withdrew his head beneath the surface, passing rapidly through the water at the rate of 15 or 20 knots an hour. He appeared to be about one hundred feet in length.

There seemed to be no doubt in the minds of any on board, that this was the veritable monster.

NEW YORK CUSTOM HOUSE.—The following description of this edifice, now erecting, is from the *Journal of Commerce*:—

"It is to be 177 feet long, and 89 feet wide, and the form and order of the building to be similar to that of the Parthenon of Athens. It is to stand on a basement story, ascended by 19 steps from Wall street and six steps on Pine street. There are to be eight Grecian Doric columns at each front, and fifteen columns and ante on each side attached to the walls. There is also to be a second row of six smaller columns back of and parallel with the main front, leaving a space of ten feet between the two rows; and nine feet between the inner row and front wall of the building. Back of the two extreme columns of the inner row there are to be two ante, and six ante attached to the wall of the rear front, leaving a space of eight feet and a half between the columns and the ante. There will thus be twenty four outside columns, five feet eight inches diameter at the bottom, and thirty two feet high, including the capital, and eighteen ante on the two sides, of the same height, five feet wide, and three feet nine inches projecting from the walls. The six inner columns of the main front will be four feet eight inches diameter at bottom, and the ante to correspond. The building is to be two stories high, except the great business hall, part of which is to be vaulted as high as the roof will permit, and its centre finished with a dome sixty two feet in diameter. This hall will occupy the centre of the building, and will be one hundred and fifty feet long, leaving a small vestibule at each end to enter from. It is to be seventy seven feet wide in the centre part, which is a circle of seventy feet diameter, with the length and breadth of the room extending beyond its circumference to these dimensions; and the four parts so extended beyond the circle are thirty three and a half feet wide, leaving six rooms and three circular stair cases in the four corners, the two largest rooms to be twenty four by twenty one feet each, besides a square stair case in the rear, and three vaults for papers at the two ends of each vestibule. The same divisions of the room is made in the second story. Nearly the same number, shape, and sizes of rooms are had in the basement, as above in the other stories, leaving all the area of the same shape and size as the great hall immediately above it; with the addition of sixteen fluted doric columns to support the vaulting and the pavement under the dome of the great hall.

[From the *Ulster Star*.]

We some weeks since adverted to the new bridge which has recently been erected across the Esopus creek in this village, by Mr. Smith Cram, for Henry Barclay, Esq. This bridge is built upon an entire new construction, and the design is perfectly original with its builder. In order to give the public some idea of the plan upon which this bridge is built, we subjoin the following description:—The bridge is supported by one main arch, which arch extends from shore to shore; it is 250 feet in length, 32 feet high, 28 feet wide at either end, and 20 feet in the centre. The roadway of the bridge, which is suspended from the arch alone by strong rods, is 17 feet above the surface of the water. The arch is formed of timbers 60 or 70 feet in length, and 6 by 12 inches thick, spiked and bolted together, making a depth of four feet, and one foot in thickness. This plan of building bridges, from the many advantages it possesses, will doubtless supersede most former methods. An arch of this description can be constructed of almost any length, over deep streams, if the banks are high, where an abutment cannot be placed, and all danger to be apprehended from floating ice is effectually obviated. The projector tells us that he could erect an arch, if the banks were quite high, of six or seven hundred feet, that would be perfectly strong and durable.

Among the numerous works of art that render our village an object of interest to visitors, Mr. Cram's new bridge, we predict, will receive a large share of admiration. The best reward that we can wish for the deserving and enterprising builder, in addition to the encomiums he daily receives from scientific men, is that he may be employed to substitute similar works for the unsightly erections which we now see in many parts of our country.

NEW JERSEY.—The annual Convention of this Diocese was held at Newark, in May last.—The B. shop and 15 clergymen, out of 24 attended. The lay deputies present were 30 from 14 congregations, and 18 congregations were not represented. The journal presents a gratifying indication of a prosperous state of things. Four new stone churches are in progress of erection.

Letter from the late Sir James Mackintosh on the Death of his Wife.—Allow me, in justice to her memory, to tell you what she was, and what I owed her. I was guided in my choice only by the blind affection of my youth, and might have formed a connexion in which a short-lived passion would have been followed by repentance and disgust; but I found an intelligent companion, a tender friend, a prudent monitor; the most faithful wives, and as of dear a mother as ever children had the misfortune to lose. Had I married a woman who was easy or giddy enough to have been infected by my imprudence, or who had rudely or harshly attempted to correct it, I should, in either case, have been irretrievably ruined: a fortune, in either case, would, with my habits, have been only a shorter cut to destruction. But I met a woman, who by the tender management of my weaknesses gradually corrected the most pernicious of them, and rescued me from the dominion of a degrading and ruinous vice. She became prudent from affection: and, though of the most generous nature, she was taught economy and frugality by her love for me. During the most critical period of my life, she preserved order in my affairs, from the care of which she relieved me; she gently reclaimed me from dissipation; she propped my weak and irresolute nature; she urged my indolence to all the exertions that have been useful and creditable to me; and she was perpetually at hand to admonish my heedlessness and improvidence. To her I owe that I am not a ruined outcast; to her whatever I am; to her whatever I shall be. In her solicitude for my interest, she never, for a moment, forgot my feelings or my character. Even in her occasional resentment,—for which I but too often gave just cause (would to God that I could recall these moments!) she had no sullenness or acrimony; her feelings were warm and impetuous, but she was placable, tender, and constant; she united the most attentive prudence with the most generous and guileless nature, with a spirit that disdained the shadow of meanness, and with the kindest and most honest heart. Such was she whom I have lost; and I have lost her when her excellent natural sense was rapidly improving, after eight years of struggle and distress had bound us fast together, and moulded our tempers to each other; when a knowledge of her worth had refined my youthful love into friendship, before age had deprived it of much of its original ardour. I lost her, alas! (the choice of my youth and the partner of my misfortunes) at a moment when I had the prospect of her sharing my better days.—This, my dear sir, is a calamity which the prosperity of the world cannot repair. To expect that any thing on this side of the grave can make it up, would be a vain and delusive expectation. If I had lost the giddy and thoughtless companion of prosperity, the world could easily have repaired my loss; but I have lost the faithful and tender partner of my misfortune: and the only consolation is in that Being, under whose severe but paternal chastisement I am cut down to the ground.

Influence of Women on Society.—It is generally believed that the influence of women on any given society is, on the average, much greater than that of men. We speak, of course, merely of the domestic state of society, for in politics and in all public matters the men have long enjoyed a complete monopoly. It is thought too, by many, that the influence which women exercise on mankind might be employed with equal effect by her on morals, and in that case some very important suggestions will at once occur to every mind. "A prudent and moral mother," remarks this translator, in his Preface, "may, in a great degree, counteract in her family the unhappy consequences of her husband's intemperate or dissolute life, much more than it is possible for an honest and industrious husband to counteract the melancholy effects of the conduct of an immoral wife. The wife's sphere is supremely that of domestic life; there is the circle of activity for which she is destined, and there, consequently, she has the greatest influence; and the lower we descend in the scale of society, the greater the influence of woman in her family. If she is unprincipled, the whole house is lost, whilst, if she walks in the path of virtue and religion, she is the safest support of a son, thrown upon the sea of life, or of a husband, oppressed by misfortune or misery, and beset by a thousand temptations. That tender age, in which the very seeds of morality must be sown and fostered in the youthful soul, is much more dependent upon the mother's care than upon that of the father—in all working classes it is almost solely dependent on the former. A woman given to intemperance, and what is generally connected with it, to violence and immoral conduct in most other respects,

is sure to bring up as many vagabonds and prostitutes as she has male and female children; and I believe I am right in stating, that the injury done to society by a criminal woman is in most cases much greater than that suffered from a male criminal.—Around one female criminal flock a number of the other sex, and ask any police officer what incalculable mischief is done by a single woman who harbors thieves and receives stolen goods, called in the slang of criminals a *fence*. I have taken pains to ascertain the history of a number of convicts, and though my inquiry has been but limited, yet as far as it goes, it shows me that there is, almost without an exception, some unprincipled or abandoned woman, who plays a prominent part in the life of every convict, be it a worthless mother, who poisons by her corrupt example the soul of her children, or a slothful and intemperate wife, who disgusts her husband with his home, a prostitute, whose wants must be satisfied by theft, or a receiver of plunder and spy of opportunities for robberies. It might be said that man and woman being destined for each other's company, some woman will be found to play a prominent part in the life of every man, and nothing is more natural, therefore, than that we find the same to be the case with criminals. This is true, and would only corroborate what I say, that the influence of woman is great; but in addition, I maintain that I found that most criminals have been led on to crime, in a considerable degree, by the unhappy influence of some corrupted female." The writer goes on to remark, that a striking difference exists between the progress of crime in women and in men. A woman who once renounces honesty and virtue, passes with the greatest facility, and with far greater ease than man, to the very blackest crimes. A theft by a woman will so harden her heart, that she will not hesitate to commit a murder, whilst a man will go on stealing for half his life, and recoil at the bare thought of imbruing his hands in the blood of a fellow creature. We may remark too, that most of those crimes which are distinguished by peculiar enormity, those of which the popular annals of almost every country make mention, are almost always perpetrated by women. Poisoning is the crime quite exclusively belonging to them. A book was published in Germany very lately, which gave an account of the Marchioness of Brinvilliers, and of the woman Gottfried, who, in 1831, was executed at Bremen for having poisoned more than thirty persons, among whom were her parents, children, husbands, lovers, friends, and servants.—[Monthly Review.]

We have attended a private view of what may be considered a great curiosity in art. The late Lord Dudley was possessed of the *beau ideal* of a dog. It was a Newfoundland of more than ordinary size, and of most amazing beauty. His Lordship loved the animal—

"—in life the firmest friend,
The first to welcome, foremost to defend,"—

and determined that his memory should, if possible, be perpetuated. As to the manner in which this was to be achieved, he entertained a peculiar notion, which was, that in all respects a model should be made of him, which should not, like the generality of sculpture, merely give the full form as in a statue, or the outline as in bas-relief; but that an accurate representation of the figure should be given, even to the color of the coat and expression of the eye: This was to be done in marble, and to Mr. M. C. Wyatt the difficult commission was given. To say that he has succeeded is the highest and best praise that can be bestowed on a work replete with so many obstacles. The statue of a beautiful beast is placed on a jasper pedestal, the base of which is surrounded by fruit and flowers in *alto relievo*, curiously formed by precious stones. On the pedestal is a cushion of Sienna colored marble, looking as soft as if the lightest foot would make a print-mark. On this cushion stands the dog. A bronze figure of a serpent is beneath him, which the powerful animal has crushed with his paw, the introduction of which at once adds to the interest of this curious piece of statuary, and ingeniously serves as a support to the ponderous weight of the dog. Some method must have been adopted for the sustaining so cumbrous a load beyond the mere support afforded by the legs, and nothing of a more effectual nature could in our opinion have been introduced. But the ingenuity, and, in our estimation, the great merit of the work, consists of the singularly felicitous manner in which the artist has represented the shaggy coat in the different colored marble, making the black so beautifully overlay and intermix with the white. The head is also truly beautiful, for not only the introduction

of gems of an exact color fill up the sockets of the eyes, but the fleshy tint which is observable at the extremity of the white part of the eye is managed with the same extraordinary kind of fidelity. The nose, by the insertion of porous-looking black marble, is made to bear the appearance of dewy moisture, so commonly observable, and it requires no exercise of the fancy to suppose that if touched a sensation of moisture would be experienced from the contact.

Effects of Scenery on Imagination.—A dull uniform life lets the imagination sleep and become torpid. I have no doubt that scenery and climate have a great effect upon the spiritual part of the imagination, as well as upon the material. Johnson, I think, became more imaginative after he had visited the Hebrides: at any rate, when our minds contemplate him carried about on the waves of the stormy ocean in which those islands are placed, and sleeping with the northern billows beating at the feet of the castellated rock where he is hospitably received, we have a pleasing idea of him, which revolts at the disputatious dreariness and vulgarity of Bolt-court. —[Sir Egerton Brydges's Autobiography.]

ADVANTAGE OF BOTANY.—But my friends cares were not confined alone to the encouragement of happy thoughts in his own mind, or in the minds of others: he was always occupied in some useful deed. One of his constant engagements was spreading through different parts of the world, flowers, fruits, plants, and trees unknown before. He introduced into this country the sultana raisin from Turkey; and of rarer fruits, the hothouses of his friends were crowded with specimens collected by his care. When he had ascertained the habits of any useful vegetable, great was the ardor with which he sought to spread the knowledge of it in the places where it was likely to prosper. In this way it would not be easy to calculate how much he added to human enjoyment, nor the debt that future generations will owe to his kind concern for his race. He preferred botany to all the other departments of natural philosophy, because its pleasures could not be made so diffusive; and he valued plants as he valued men—in proportion to their usefulness. "You cannot," he would say, "multiply minerals, nor insects, nor animals at will; you cannot communicate to others this species of your riches without self deprivation; but of most vegetable productions you can easily increase the number: you can enrich others without impoverishing yourself." —[Bowring's Minor Morals.]

A UTILITARIAN IN THE FIELDS.—He talked to his boys of the beauties of nature that surrounded them, and showed them in what a wonderful variety of ways beauty is a source of pleasure. He bade them listen to the songs of the birds, to the fall of the waters, to the thousand sounds of the earth and air,—teaching them how each added something to the great account of living happiness. When the wind blew in their faces, or the sun shone on their foreheads, or the frost bit the ends of their fingers, he told them how each administered to man's enjoyment. If the air was fragrant with the flowers of spring, or the sweet hay of summer, he explained to them how the organs of smell were made subservient to the same great end; and as they looked upon the different tribes of busy creatures partaking of the various food presented to them by their Maker's munificence, he pointed out how numerous their pleasures; how marvellously provided for, how infinitely spread. "See," said he, "the great purpose of Providence; the general lesson of creation—happiness." And the thought again came over Arthur's mind, that anger never made any body the happier. —[Dr. Bowring's Minor Morals.]

VEGETABLE EXISTENCE.—If we review every region of the globe, from the scorching sands of the equator to the icy realms of the poles, or from the lofty mountain summits to the dark abysses of the deep; if we penetrate into the shades of the forest, or into the caverns and secret recesses of the earth; nay, if we take up the minutest portion of stagnant water, we still meet with life in some new and unexpected form, yet ever adapted to the circumstances of its situation. The vegetable world is no less prolific in wonders than the animal. Here, also, we are lost in admiration at the never-ending variety of forms successively displayed to view in the innumerable species which compose this kingdom of nature, and at the energy of that vegetative power which, amidst such great differences of situation, sustains the modified life of each individual plant, and which continues its species in endless perpetuity. It is well known that, in all places where vegetation has been established, the gems are so intermingled with the

soil that whenever the earth is turned up, even from considerable depths, and exposed to the air, plants are soon observed to spring, as if they had been recently sown; in consequence of the germination of seeds which had remained latent and inactive during the lapse of perhaps many centuries. Islands formed by coral reefs, which have risen above the level of the sea, become, in a short time, covered with verdure. From the materials of the most sterile rock, and even from the yet recent cinders and lava of the volcano, nature prepares the way for vegetable existence. The slightest crevice or inequality is sufficient to arrest the invisible germs that are always floating in the air, and affords the means of sustenance to diminutive races of lichens and mosses. These soon overspread the surfaces, and are followed, in the course of a few years, by successive tribes of plants of gradually increasing size and strength; till at length the island, or other favored spot, is converted into a natural and luxuriant garden, of which the productions, rising from grasses to shrubs and trees, present all the varieties of the fertile meadow, the tangled thicket, and the widely spreading forest. Even in the desert plains of the torrid zone, the eye of the traveller is often refreshed by the appearance of a few hardy plants, which find sufficient materials for their growth in these arid regions; and in the realms of perpetual snows which surround the poles, the navigator is occasionally startled at the prospect of fields of a wide expanse of microscopic vegetation. —[Dr. Roger's Bridgewater Treatise.]

A DUTCH LANDSCAPE.—Towards evening we entered the dominions of the United Provinces, and had all their glory of canals, treck-schuyts, and windmills, before us. The minute neatness of the villages, their red roofs, and the lively green of the willows which shade them, corresponded with the ideas I had formed of Chinese prospects; a resemblance which was not diminished upon viewing on every side the level scenery of enamelled meadows, with stripes of clear water across them, and innumerable barges gliding busily along. Nothing could be finer than the weather; it improved each moment, as if propitious to my exotic fancies; and, at sunset, not one single cloud obscured the horizon. Several storks were parading by the water side, amongst flags and osiers; and, as far as the eye could reach, large herds of beautifully spotted cattle were enjoying the plenty of their pastures. I was perfectly in the environs of Canton, or Ning Po, till we reached Meerdylke. You know fumigations are always the current recipe in romance to break an enchantment; as soon, therefore, as I left my carriage and entered my inn, the clouds of tobacco which filled every one of its apartments dispersed my Chinese imaginations, and reduced me in an instant to Holland. —[Mr. Beckford.]

A PARASITE TREE.—I have recently, on a visit to Mr. Gee's plantation, three miles south of Quincy, Gadsden county, in this territory, observed a natural curiosity, the following description of which may be interesting to you and many of the readers of the American Journal of Arts and Science: It is a yellow pine tree bearing another in a perfectly healthful and flourishing state, like itself and those in the woods around them. The trees, as represented in this sketch, are united about thirty-five feet from the ground, where they entwine around each other. The one that is borne extends down to within about two feet of the ground, and is alive and healthful to its lowest extremity. These trees have been in the condition in which they now are for a period longer back than the first settlement of the country by the present population. They were pointed out by the Indians as a curiosity to the first Americans who came to Florida. The stump of the tree which is borne has long since disappeared, and the place which it occupied is now grown up in small bushes of grass. —[Letter in Silliman's Journal.]

A tried Recipe for Burns.—Keep on hand a saturated solution of alum (four ounces in a quart of hot water) dip a cotton cloth in this solution and lay it immediately on the burn. As soon as it shall have become hot or dry, replace it by another, and thus continue the compress as often as it dries, which it will, at first, do very rapidly. The pain immediately ceases, and in twenty-four hours under this treatment the wound will be healed, especially if the solution be applied before the blisters are formed. The astringent and drying quality of the alum completely prevents them. The deepest burns, those caused by boiling water, drops of melted metal, phosphorus, gunpowder, fulminating powder, &c., have all been cured by this specific. —[Jour. des Connaissances Usuelles.]

STEPHENSON,

Builder of a superior style of Passenger Cars for Railroads
No. 264 Elizabeth street, near Bloeker street,
New-York.

RAILROAD COMPANIES would do well to examine these Cars; a specimen of which may be seen on that part of the New-York and Harlem Railroad, now in operation.
Jas C

RAILROAD CAR WHEELS, BOXES AND
AND OTHER RAILROAD CASTINGS.

Also, AXLES furnished and fitted to wheels complete at the Jefferson Cotton and Wool Machine Factory and Foundry, Paterson, N. J. All orders addressed to the subscribers at Paterson, or 60 Wall street, New-York, will be promptly attended to. Also, CAR SPRINGS.

Also, Flange Tires turned complete.

JR ROGERS, KETCHUM & GROSVENOR.

NOVELTY WORKS,

Near Dry Dock, New-York.

THOMAS B. STILLMAN, Manufacturer of Steam Engines, Boilers, Railroad and Mill Work, Lathes, Presses, and other Machinery. Also, Dr. Nott's Patent Tubular Boilers, which are warranted, for safety and economy, to be superior to any thing of the kind heretofore used. The fullest assurance is given that work shall be done well, and on reasonable terms. A share of public patronage is respectfully solicited.



INSTRUMENTS.

SURVEYING AND NAUTICAL INSTRUMENT MANUFACTORY.

EWING & HEARTTE, at the sign of the Quadrant, No. 35 South street, one door north of the Union Hotel, Baltimore, beg leave to inform their friends and the public, especially Engineers, that they continue to manufacture to order and keep for sale every description of Instruments in the above branches, which they can furnish at the shortest notice, and on fair terms. Instruments repaired with care and promptitude. For proof of the high estimation on which their Surveying Instruments are held, they respectfully beg leave to tender to the public perusal, the following certificates from gentlemen of distinguished scientific attainments.

To Ewing & Heartte.—Agreeably to your request made some months since, I now offer you my opinion of the Instruments made at your establishment, for the Baltimore and Ohio Railroad Company. This opinion would have been given at a much earlier period, but was intentionally delayed, in order to afford a longer time for the trial of the Instruments, so that I could speak with the greater confidence of their merits, if such they should be found to possess.

It is with much pleasure I can now state that notwithstanding the Instruments in the service procured from our northern cities are considered good, I have a decided preference for those manufactured by you. Of the whole number manufactured for the Department of Construction, to wit: five Levels, and five of the Compasses, not one has required any repairs within the last twelve months, except from the occasional imperfection of a screw, or from accidents, to which all Instruments are liable. They possess a firmness and stability, and at the same time a neatness and beauty of execution, which reflect much credit on the artists engaged in their construction.

I can with confidence recommend them as being worthy the notice of Companies engaged in Internal Improvements, who may require Instruments of superior workmanship.

JAMES F. STABLER,

Superintendent of Construction of the Baltimore and Ohio Railroad.

I have examined with care several Engineers' Instruments of your Manufacture, particularly Spirit levels, and Surveyors' Compasses; and take pleasure in expressing my opinion of the excellence of the workmanship. The parts of the levels appeared well proportioned to secure facility in use, and accuracy and permanency in adjustments.

These instruments seemed to me to possess all the modern improvement of construction, of which so many have been made within these few years; and I have no doubt but they will give every satisfaction when used in the field.

WILLIAM HOWARD, U. S. Civil Engineer.

Baltimore, May 1st, 1853.

To Messrs Ewing and Heartte.—As you have asked me to give my opinion of the merits of those instruments of your manufacture which I have either used or examined, I cheerfully state that as far as my opportunities of my becoming acquainted with their qualities have gone, I have great reason to think well of the skill displayed in their construction. The neatness of their workmanship has been the subject of frequent remark by myself, and of the accuracy of their performance I have received satisfactory assurance from others, whose opinion I respect, and who have had them for a considerable time in use. The efforts you have made since your establishment in this city, to relieve us of the necessity of sending elsewhere for what we may want in our line, deserve the unqualified approbation and our warm encouragement. Wishing you all the success which your enterprise so well merits, I remain, yours, &c.

H. H. LATROBE,

Civil Engineer in the service of the Baltimore and Ohio Railroad Company.

A number of other letters are in our possession and might be introduced, but are too lengthy. We should be happy to submit them, upon application, to any person desirous of perusing the same.

We are gratified to learn that Professor Edward H. Courtenay, late Professor of Natural and Experimental Philosophy in the United States Military Academy at West Point, has accepted the chair of Mathematics in the University of Pennsylvania. Dr. Thomas C. James, who for a long time, has filled with great ability the professorship of Midwifery in the Medical Department of that institution has resigned his chair, which is now vacant, and to fill which, it is understood, nominations will be received by the Board of Trustees at their next stated meeting, which will be held early in September.—[Philadelphia U. S. Gazette.]

Drowned from on board one of the Canal boats in the river, on the night of the 7th inst, James McConachie, a native of Aberdeen, Scotland; naturally of a warm-hearted and generous disposition. His untimely fate will be deplored by highly respectable parents and an affectionate wife.—[Albany Evening Journal.]

[From the Balt. American.]

Late Georgia papers contain a long publication signed by the counsel of the Cherokee Indians, detailing the particulars of a personal controversy between them and Governor Lumpkin of Georgia. In a correspondence between the Governor and the military authorities concerning the recent apprehensions of hostilities in the Indian country, he had attributed the blame to what he termed a "free combination of men" who, for professional gain, were encouraging the Indians in litigation, and fomenting their discontent with the State proceedings. Messrs. Hansell and Rockwell, two of the counsel of the Cherokees, considering themselves injuriously treated in this allusion, addressed separate letters to the Governor, requiring an avowal, whether, in the exceptionable passages, they or either of them were intended by him. He seems to have treated the application very cavalierly—sending back the letters in a blank envelope to the writers. They have accordingly joined in an appeal to the public, in which they give an unqualified denial to the Governor's charges, and challenge him to produce proof. They apply to the conduct of the Governor such descriptive epithets as occur to men who believe themselves wronged without provocation or justice.

Intelligence from Texas, contained in the New Orleans papers, shows that considerable excitement prevails there respecting the continued imprisonment of Col. Austin by the Mexican government.—On the 14th May, Austin was still in prison, though not so strictly confined as previously. Santa Anna had enlarged the bonds of his confinement, and expectations were entertained that he would be relieved within a week.

At Texas, the Alcade of the municipality of Austin had summoned a meeting of the ayuntamiento, to consider the treatment of Col. Austin, and the general subject of a State government for Texas, which forms the cause of dissatisfaction between Austin and the Mexican authorities. The address of the Alcade is published in the New Orleans Bulletin. It is an animated appeal to the people to assume the responsibility of the acts for which Austin is imprisoned, and unite in an energetic demand for a State government. A general memorial to government to this effect is recommended.

In the present political divisions of Mexico, Texas is attached to the province of Coahuila,—and all laws emanate from that legislature. These are not very strictly enforced; the Colonists yielding obedience, in general, and without much interference, only to those which suit their views and position. Among the State laws recently enacted, is one establishing entire toleration of all religious sects, and another establishing the trial by jury. These salutary regulations must not be confounded with the federal enactments of the Mexican Congress, out of which the late civil disturbances have grown. They are State laws. They are expected to quiet the minds of the settlers, and reconcile them to a longer continuance of their dependant connexion on Coahuila.

The national boundaries of Texas include a territory larger than the kingdom of France, and from its fertility, capable of sustaining a much larger population. France supports now about thirty two millions.

RAILROAD AND CANAL MAP.

THIS long promised Map is now ready for those who wish it. Its size is 24 by 40 inches. It is put up in a convenient pocket form, in morocco covers, and accompanied by over 70 pages of letter press, giving a concise description of, or reference to, each Road and Canal delineated on the Map. It will also be put up in Marble Paper covers, so as to be forwarded by mail to any part of the country; the postage of which, cannot exceed 44, and probably not 25 cents, to any part of the country.

Published at 35 Wall street, N. Y., by
D. K. MINOR & J. E. CHALLIS.

MECHANICS' MAGAZINE.

THE third Volume is now ready. It consists of 384 pages of letter press, and is illustrated by nearly 150 engravings on wood, spiritedly executed, and a full length portrait of LAFAZETTE, on copper, as a frontispiece.

The following are a few only of the numerous notices taken of the Magazine, by gentlemen connected with the press in different sections of the country:—

A rapid glance at its contents discovers that it contains the same judicious preparation of materials that has hitherto distinguished the publication. There are a number of articles, essentially valuable from the solid information embodied in them, and others, again, that will recommend themselves at once to the less severe reader, who always looks for some entertainment to be mingled with instruction.—[N. York American.]

The theoretical and practical Mechanic will find a mine of useful information in these pages.—[Mercantile & Advocate, N. Y.]

This periodical really deserves credit for the ability and attention with which it keeps pace with the mechanical improvements of the age. It is, we see, edited by Mr. Knight, late of the London Mechanics' Magazine, a work which did more to elevate the state of knowledge among the working classes, than any other in England.—[Commercial Advertiser.]

It is stored with representations and descriptions of improvements in machinery, and of newly invented articles, together with information valuable to every class of citizens.—[U. S. Gazette, Philad.]

It contains information on almost every subject connected with mechanics, and a register of inventions and improvements.—[Montreal Gazette.]

It is a work well worthy the attention of every mechanic and one which affords to genius a chance of exhibiting talents.—[New Orleans Merc. Adv.]

This is a publication of practical value and of deserved popularity.—[Al. any Argus.]

The work needs only to become known to insure it a very extensive circulation. It certainly cannot fail to be highly interesting and useful to the numerous class of persons for whom it is particularly designed.—[Paterson Intelligencer.]

There is no periodical in this country which more deserves the patronage of the mechanic than this, and which will better repay him for the expense incurred and the time spent in its perusal.—[Elmyra Gazette.]

We wish we could persuade our young operatives—upon whose intelligence and virtue so much depends—to substitute the substantial fare which this work affords, for the trash which many of them are too eager to devour.—[N. J. Journal.]

It forms a truly valuable repository, alike suitable to the drawing room and to the cottage.—[Watertown Register.]

Every mechanic who wishes to keep pace with the improvement of the age—to avail himself of the aid which science is constantly bringing to art, should subscribe for the Mechanics' Magazine.—[Washington Spy.]

Having perused the first volume of your journal with much satisfaction, and I trust some profit, I deem it my duty as an old mechanic, to tender you my acknowledgments. * * * In my opinion, it ought to be owned by every mechanic, artificer and manufacturer of our country; and especially by beginners, and made the study of all their leisure hours.—[Ben'n Russell, one of the oldest mechanics in Boston.]

The Mechanics' Magazine and Register of Inventions is published by the Proprietors, D. K. MINOR and J. E. CHALLIS, at No. 35 Wall street New York: in weekly sheets of 16 pages, at 64 cents—in monthly parts of 64 pages, at 312 cents—in volumes of 384 pages, in cloth boards, at \$1.75—or at \$3 per annum, in advance.—JOHN KNIGHT, (formerly Proprietor of the London Mechanics' Magazine,) Editor. JY18 1f

ALBANY SEED-STORE AND HORTICULTURAL REPOSITORY.

The subscriber having resumed the charge of the above establishment, is now enabled to furnish traders and others with FRESH GARDEN SEEDS, upon very favorable terms, and of the growth of 1833, warranted of the best quality.

The greatest care and attention has been bestowed upon the growing and saving of Seeds, and none will be sold at this establishment excepting those raised expressly for it, and by experienced seedmen; and those kinds imported which cannot be raised to perfection in this country; these are from the best houses in Europe, and may be relied upon as genuine.

It is earnestly requested whenever there are any failures hereafter, they should be represented to the subscriber; not that it is possible to obviate unfavorable seasons and circumstances, but that satisfaction may be rendered and perfection approximated.

Also—French Lucern, White Dutch Clover, White Mulberry Seed, genuine Mangel Wurzel, Yellow Locust, Ruta Baga, and Field Turnip Seeds, well worth the attention of Farmers.

W. THORBURN,

347 N. Market st (opposite Post Office.

Catalogues may be had at the Store; if sent for by mail, will be forwarded gratis. Orders solicited early, as the better success can be done in the execution.

* * * Mr. Thorburn is also Agent for the following publications, to wit:—

NEW YORK FARMER and American Gardener's Magazine. MECHANICS' MAGAZINE and Register of Inventions & Improvements.

AMERICAN RAILROAD JOURNAL and Advocate of Internal Improvements; and the

NEW-YORK AMERICAN, Daily, Tri-Weekly, and Semi-Weekly, either or all of which may be seen and obtained by those who wish them by calling at 347 North Market street, Albany.

TOWNSEND & DUFFEE, of Palmyra, Manufacturers of Railroad Rope, having removed their establishment to Hudson, under the name of Duffee, May & Co. offer to supply Rope of any required length (without splice) for inclined planes of Railroads at the shortest notice, and deliver them in any of the principal cities in the United States. As to the quality of Rope, the public are referred to J. B. Jervis, Eng. M. & H. R. Co., Albany; or James Archibald, Engineer Hudson and Delaware Canal and Railroad Company, Carbondale, Luzerne county, Pennsylvania.

Hudson, Columbia county, New York, }
January 29, 1833.

SURVEYORS' INSTRUMENTS.

Compasses of various sizes and of superior quality warranted.

Leveling Instruments, large and small sizes, with high magnifying powers with glasses made by Troughton, together with a large assortment of Engineering Instruments, manufactured and sold by E. & G. W. BLUNT, 154 Water street, corner of Maidenlane.

LOCOMOTIVE ENGINES.

THE AMERICAN STEAM CARRIAGE COMPANY, OF PHILADELPHIA, respectfully inform the public, and especially Railroad and Transportation Companies, that they have become sole proprietors of certain improvements in the construction of Locomotive Engines, and other railway carriages, secured to Col. Stephen H. Long, of the United States Engineers, by letters patent from the United States, and that they are prepared to execute any orders for the construction of Locomotive Engines, Tenders, &c. with which they may be favored, and pledge themselves to a punctual compliance with any engagements they may make in reference to this line of business.

They have already in their possession the requisite apparatus for the construction of three classes of engines, viz. engines weighing four, five, and six tons.

The engines made by them will be warranted to travel at the following rates of speed, viz. a six ton engine at a speed of 15 miles per hour; a five ton engine at a speed of 18 miles per hour; a four ton engine at a speed of 22 1/2 miles per hour. Their performance in other respects will be warranted to equal that of the best English engines of the same class, with respect not only to their efficiency in the conveyance of burthens, but to their durability, and the cheapness and facility of their repairs.

The engines will be adapted to the use of anthracite coal, pine, wood, coke, or any other fuel hitherto used in locomotive engines.

The terms shall be quite as favorable, and even more moderate, than those on which engines of the same class can be procured from abroad.

All orders for engines, &c. and other communications in reference to the subject, will be addressed to the subscriber, in the city of Philadelphia, and shall receive prompt attention.

By order of the Company, WILLIAM NORRIS, Secretary.

December 2d, 1833.

For further information on this subject see No. 49, page 772, Vol. 2, of Railroad Journal.

RAILWAY IRON.

		Flat Bars in	
Ninety-five tons of 1 inch by 1/2 inch,		lengths of 14 to 15	
200	do. 1 1/2 do.	do.	feet counter sunk
40	do. 1 1/2 do.	do.	holes, ends cut at
800	do. 2 do.	do.	an angle of 45 de-
800	do. 2 1/2 do.	do.	grees with spli-
soon expected.		cing plates, nails	
		to suit.	

250 do. of Edge Rails of 36 lbs. per yard, with the requisite chairs, keys and pins.

Wrought Iron Rims of 30, 33, and 36 inches diameter for Wheels of Railway Cars, and of 60 inches diameter for Locomotive wheels.

Axles of 2 1/2, 3, 3 1/2, 3 3/4, and 4 inches diameter for Railway Cars and Locomotives of patent iron.

The above will be sold free of duty, to State Governments and Incorporated Governments, and the Drawback taken in part payment.

A. & G. RALSTON.

Models and samples of all the different kinds of Rails, Chairs, Pins, Wedges, Spikes, and Splicing Plates, in use, both in this country and Great Britain, will be exhibited to those disposed to examine them.

d1fmeowr

ENGINEERING AND SURVEYING INSTRUMENTS.

The subscriber manufactures all kinds of Instruments in his profession, warranted equal, if not superior, in principles of construction and workmanship to any imported or manufactured in the United States; several of which are entirely new: among which are an Improved Compass, with a Telescope attached, by which angles can be taken with or without the use of the needle, with perfect accuracy—also, a Railroad Goniometer, with two Telescopes—and a Leveling Instrument, with a Goniometer attached, particularly adapted to Railroad purposes.

WM. J. YOUNG,
Mathematical Instrument Maker, No. 9 Dock street, Philadelphia.

The following recommendations are respectfully submitted to Engineers, Surveyors, and others interested.

Baltimore, 1832.

In reply to thy inquiries respecting the Instruments manufactured by thee, now in use on the Baltimore and Ohio Railroad. I cheerfully furnish thee with the following information. The whole number of Levels now in possession of the department of construction of thy make is seven. The whole number of the "Improved Compass" is eight. These are all exclusive of the number in the service of the Engineer and Graduation Department.

Both Levels and Compasses are in good repair. They have in fact needed but little repair, except from accidents to which all instruments of the kind are liable.

I have found that thy patterns for the levels and compasses have been preferred by my assistants generally, to any others in use, and the Improved Compass is superior to any other description of Goniometer that we have yet tried in laying the rails on this Road.

This instrument, more recently improved with a reversing telescope, in place of the vane sights, leaves the engineer scarcely any thing to desire in the formation or convenience of the Compass. It is indeed the most completely adapted to lateral angles of any simple and cheap instrument that I have yet seen, and I cannot but believe it will be preferred to all others now in use for laying off rails—and in fact, when known, I think it will be as highly appreciated for common surveying.

Respectfully thy friend,

JAMES P. STABLER, Superintendent of Construction of Baltimore and Ohio Railroad.

Philadelphia, February, 1833.

Having for the last two years made constant use of Mr. Young's "Patent Improved Compass," I can safely say I believe it to be much superior to any other instrument of the kind, now in use, and as such most cheerfully recommend it to Engineers and Surveyors.

E. H. GILL, Civil Engineer.

Germanstown, February, 1833.

For a year past I have used Instruments made by Mr. W. J. Young, of Philadelphia, in which he has combined the properties of a Theodolite with the common Level.

I consider these Instruments admirably calculated for laying out Railroads, and can recommend them to the notice of Engineers as preferable to any others for that purpose.

HENRY R. CAMPBELL, Eng. Philad.,

German, and Norristown Railroad